



CITY OF CARLISLE.

REPORT

ON THE

Sanitary Condition of the City of Carlisle,

FOR THE YEAR 1914,

BY

JOSEPH BEARD,

D.P.H. (Cantab.), F.R.S. (Edin.)

Of Gray's Inn, Barrister-at-Law ;

Fellow of the Royal College of Surgeons, Edinburgh ;

Member of the Royal College of Surgeons, England ;

Licentiate of the Royal College of Physicians, London.

Medical Officer of Health,
School Medical Officer,
Chief Tuberculosis Officer, etc.

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HEALTH COMMITTEE
OF THE
CARLISLE CITY COUNCIL, 1914—1915.

HIS WORSHIP THE MAYOR (ALDERMAN DIXON, J.P.), Chairman.

MR. ALDERMAN DALTON, Deputy Chairman.

MR. COUNCILLOR EDMONDSON

” ” FITZSIMMONS

” ” FOSTER

” ” HUTCHINSON

” ” RIDLEY

” ” THOMSON

” ” WHEATLEY

” ” WRIGHT

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To the Chairman and Members of the Health Committee.

Mr. Chairman and Gentlemen,

In accordance with the Regulations and Memoranda of the Local Government Board, I have the honour to submit my Annual Report upon the Health and Sanitary Condition of the City of Carlisle during 1914.

The latest Memorandum of the Board asks for more information than previous Memoranda, so that in addition to Birth and Mortality Statistics, and the other work carried out during the year, including the measures adopted against the prevention of epidemic and other diseases, I have made additions relating to such matters as are at present to hand.

I have to thank you for your support during the year.

I am, Gentlemen,

Your obedient Servant,

JOSEPH BEARD.

Health Department,

19 Fisher Street, Carlisle,

7th May, 1915.

Statistical Summary for the year-1914.

Area in Acres	...	...	...	...	4,488
Population (Estimated 1914)	...	...	...	...	52,530
Population per acre (Density)	...	...	...	...	11·7
Number of Families or separate Occupiers (estimated)	...	...	...	...	10,723
Rateable Value	...	...	...	...	£261,959
Number of Inhabitants per House (Census, 1911)	...	...	...	...	4·4
Birth-rate per 1,000 living	...	...	...	...	23·0
Death-rate per 1,000 living	...	...	...	...	15·5
Infant Mortality Rate	...	...	...	...	122·4
Percentage of Uncertified Deaths	...	...	...	...	3·1
Total Deaths from Diarrhoea	...	...	...	...	30
Phthisis, Death rate per 1,000 living	...	...	...	...	1·3
Infectious Cases Notified (including Tuberculosis 287 cases)	...	...	...	...	663
Infectious Cases Isolated at the Fever Hospital	...	...	...	...	229
Total Rainfall in inches	...	...	...	...	28·31

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE CITY.

Carlisle is an episcopal city, a County Borough, and the capital of Cumberland. It is an Assize Town, and Poor Law Union of a number of parishes, and is in the Diocese of Carlisle.

It is distant about 300 miles both by rail and road from London (Euston).

The City occupies a slight eminence at the confluence of the River Eden with its tributaries the Caldew and Petteril. The central portion of the old City is situate on a slight rocky eminence about 70 feet above ordnance datum, while the remainder of the City, with the exception of Stanwix (which is partly on hard red sandstone), stands upon alluvial land, as a result of which the lower parts of the City have a high ground water level, which gives rise to a humid atmosphere. The average annual rainfall is 32 inches, and the prevailing wind is south-westerly.

It is a City of great antiquity, and is said to be the only one in England bearing an entirely British name.

A town built by a powerful tribe of Brigantes occupied part of the site on which the City now stands, and bore the name of *Caer-lywelydd*, which in course of time was corrupted to *Caer-luel*, and so by easy transition into *Carleol* and *Carlisle*.

The Romans built a fortress here, and vestiges of the walls erected as a barrier against the Picts and Scots are yet to be seen in parts of the City.

Carlisle was a borough by prescription and became a Corporation by charter, granted by Henry II; confirmatory charters were subsequently granted by Edward III, Henry VII, Henry VIII, and succeeding monarchs to Charles I. It has a Commission of Peace, with Quarter Sessions, and possesses ancient privileges and customs, valuable rights, lands, and properties. The City is well governed, and is complete with modern requirements relating to all Public Health and Sanitary matters.

The district is one which has a large variety of industries, the chief sources of which are the railways of several companies which have their termini in the City and employ 12.7 per cent. of the males, while engineering works employ a further 6.9 per cent. There are also printing and lithographic works, textile, dyeing and bleaching works, carpet factories, breweries, tanneries, felt hat works, biscuit and confectionery factories, and smaller miscellaneous trades. An extensive trade is also carried on in cattle and timber. The manufacture of woollens was established by Hamburg merchants about 1747, and coarse linen cloths and calico works were shortly afterwards established. whilst cotton spinning was commenced towards the close of the last century.

The percentage of female labour employed in textile factories is 5.8, this percentage being larger than in the county as a whole, and larger than that which obtains in Durham and Northumberland, whilst female labour is also employed in the lithographic, biscuit, carpet, sweet, and several other factories.

STATISTICS

RELATING TO

BIRTHS, DEATHS, AND CAUSES OF
DEATHS, &c.

BIRTHS.

The number of births registered during the year was 1209, of which 629 were males and 580 females; these figures show an increase of 45 births over the figure for 1913.

Calculations based upon the estimated population of 52,530, give a birth-rate of 23.0 per 1,000, which shows an increase of 0.9 per 1,000 over the figure for the year 1913.

Year.	Number of Births Registered.			Total.
	Males.	Females.	Per 1,000 of the population.	
1913	569	595	22.1	1164
1914	629	580	23.0	1209

The birth-rate for England and Wales during 1914, calculated as a whole, was 23.6 per 1,000, and for the 97 great towns, to which classification Carlisle belongs, 24.9 per 1,000. The 145 smaller towns show an average birth-rate of 23.6 per 1,000, whilst the rate for England and Wales, less the 242 great and small towns, was 21.9 per 1,000.

ILLEGITIMATE BIRTHS.

The number of illegitimate births registered during 1914 was 76, making a figure equal to 62.8 per 1,000 of the total births.

The distribution of the illegitimate births to the Registration Sub-Districts was as follows :—

St. Cuthbert's—51, equivalent to 91.0 per 1,000 of the total births in that district.

St. Mary's—25, equivalent to 41.5 per 1,000 of the total births in that district.

Stanwix—Nil.

Dalston—Nil.

Wetheral—Nil.

The number of illegitimate births registered shows an increase of 19 over the figure for 1913, which was 57, the distribution being as follows :—

St. Cuthbert's—31, equivalent to 56.5 per 1,000 of the total births in that district.

St. Mary's—22, equivalent to 39.9 per 1,000 of the total births in that district.

Stanwix—4, equivalent to 68.9 per 1,000 of the total births in that district.

Dalston—Nil.

Wetheral—Nil.

Upon investigating the births, to which the figures for 1914 relate, I find that in 5 instances, which is equal to 6.5 per cent. of the total illegitimate births, the mother was not a resident of the City.

Table showing details of the Births in the several Sub-
Registration Districts, 1914.

QUARTER ENDING.	ST. MARY.		ST. CUTHBERT.		STANWIX.		DALSTON.		WETHERAL.		TOTALS FOR CITY.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
March 31	76	80	61	81	5	5	...	1	1	...	310
June 30.....	83	78	84	76	7	5	...	...	...	...	333
September 30	86	73	65	70	4	7	...	2	...	...	307
December 31..	72	53	78	45	6	4	1	...	...	...	259
Totals... ..	317	284	288	272	22	21	1	3	1	...	1209

The following table shows the number of births registered, and the annual birth-rate per 1,000 living at all ages in Carlisle since 1875, the earliest record available :—

<i>Year.</i>	<i>No. of Births Birth- Registered. rate.</i>		<i>Year.</i>	<i>No. of Births Birth- Registered. rate.</i>	
1875	...	1,136 35.5	1896	...	1,246 29.6
1876	...	1,236 38.6	1897	...	1,324 30.8
1877	...	1,265 38.5	1898	...	1,311 30.0
1878	...	1,347 38.7	1899	...	1,300 29.4
1879	...	1,319 37.7	1900	...	1,354 30.1
1880	...	1,288 37.0	*1901	...	1,243 27.3
*1881	...	1,291 36.0	1902	...	1,245 27.0
1882	...	1,272 35.3	1903	...	1,322 28.4
1883	...	1,229 32.3	1904	...	1,278 26.9
1884	...	1,303 35.0	1905	...	1,168 24.3
1885	...	1,285 34.0	1906	...	1,227 25.3
1886	...	1,262 33.0	1907	...	1,178 23.8
1887	...	1,214 31.3	1908	...	1,223 24.4
1888	...	1,307 33.5	1909	...	1,149 22.6
1889	...	1,224 30.6	1910	...	1,145 22.2
1890	...	1,215 30.0	*1911	...	1,109 23.8
*1891	...	1,207 30.8	†1912	...	1,142 24.6
1892	...	1,213 30.5	‡1912	...	1,149 20.2
1893	...	1,389 34.5	1913	...	1,164 22.1
1894	...	1,315 32.0	1914	...	1,209 23.1
1895	...	1,311 31.4			

*Census years.

†Old City.

‡Extended City.

DEATHS.

The total number of deaths registered during 1914 was 848, as compared with 821 in 1913, making a gross death-rate of 16.1 per 1,000 for the year, calculated upon the estimated population living at all ages.

22 deaths occurred of persons belonging to the City in institutions and other places outside, while the deaths of 69 persons not belonging to the City occurred in public institutions and other places within the City.

Excluding the 69 deaths of persons belonging to other districts, and substituting the 22 deaths of Carlisle residents which occurred in the districts beyond the City boundaries, a nett figure of 801 remains. This gives a nett death-rate for 1914 of 15.2 per 1,000 of the estimated population living at all ages.

The standardised death-rate for the City, which is obtained by multiplying the nett death-rate by the factor supplied by the Registrar-General, viz. :—1.0200, is equivalent to 15.5 per 1,000 of the estimated population living at all ages.

The standardised death-rate for the whole of England and Wales for 1914 was 13.6 per 1,000 living at all ages, and for the 97 great towns, amongst which Carlisle figures, 14.9 per 1,000; the death-rate for the 145 smaller towns was 12.9 per 1,000, whilst the death-rate for England and Wales (less the 242 great and small towns) was 12.2 per 1,000 living.

Table showing details of the Deaths in the several Sub-Registration Districts, 1914.

QUARTER ENDING.	ST. MARY.				ST. CUTHBERT.				STANWIX.				DALSTON.				WETHERAL.				TOTALS FOR CITY.	
	Males.		Females.		Males.		Females.		Males.		Females.		Males.		Females.		Males.		Females.			
	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years		
	20	51	14	42	11	36	9	34	1	8	1	5	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years		Under 5 years
March 31	20	51	14	42	11	36	9	34	1	8	1	5	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years	Under 5 years	Over 5 years
June 30	15	41	8	51	10	40	11	33	...	6	..	2	...	...	...	...	...	...	...	...	...	...
Sept. 30	16	40	19	38	20	26	8	32	1	2	...	4	...	...	...	1	...	...	...	...	...	...
Dec. 31	21	41	6	41	7	25	6	31	...	3	1	6	...	...	...	...	...	...	...	...	...	...
TOTALS	72	173	47	172	48	127	34	130	2	19	2	17	...	1	1	1	1	..	1	..	1	848

Table showing the number of Deaths at all Ages and at several Age periods.

	All Ages.	Under 1 Year.	5 and under 5.	5 and 15.	15 and under 25.	25 and 65.	65 and upwards.	St. Mary's.	St. Cuthbert's.	Stanwix.	Dalston.	Wetheral.
No. of Deaths at all ages and at several age periods ...	848	153	51	31	40	308	265	464	339	40	3	2

The following list shows the number of deaths of persons not belonging to the district occurring in public institutions and other places within the City :—

Private Nursing Homes	...	...	7
Fusehill Hospital...	...	...	3
Grasmere Street	...	...	1
Portland Place	...	...	1
Infirmary	...	...	45
Spencer Street	...	...	3
Bower Street	...	...	1
Strathclyde House	...	...	3
Fever Hospital	...	...	2
Castle	...	...	1
Burlington Place	...	...	1
Annetwell Street	...	...	1
Total...			69

The following list shows the number of deaths of persons belonging to the district occurring in public institutions and other places outside the City :—

Garlands Asylum...	...	...	14
Brampton	...	...	1
Aldershot	...	...	1
Silloth	...	...	1
Kirkandrews-on-Eden	...	...	1
Lazonby	...	...	1
Brierfield	...	...	1
Kingstown	...	...	1
Coleford	...	...	1
Total...			22

The following table shows the Birth-Rate and Death-Rate as compared with England and Wales for the year.

	Annual Rate per 1,000 living.			Deaths under 1 Year to 1,000 Births.
	Births.	Deaths.		
		Crude.	Standard-ised.	
England and Wales	23.6	13.9	13.6	105
97 Great Towns (including London)...	24.9	14.6	14.9	113
145 Smaller Towns	23.6	12.8	12.9	104
England and Wales, less the 242 Towns ...	21.9	13.3	12.2	93
CARLISLE	23.0	16.1 †	15.5 ‡	122.4

† Includes deaths of Non-Residents in the City.

‡ The factor for correction as supplied by the Registrar-General is 1.0200.

The following table shows the Vital Statistics for the whole City during 1914 and five previous years.

YEAR.	Population estimated to Middle of each Year	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Uncorrected Number.	Nett.		Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of age		AT ALL AGES.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1909	50,675	1149	1149	22.6	735	14.5	53	27	142	123	709	13.9
1910	51,433	1145	1145	22.2	683	13.2	63	28	125	110	648	12.6
1911	46,420	1109	1106	23.8	776	16.7	60	17	161	145	733	15.7
1912	52,225	1149	1149	20.2	823	15.7	63	23	120	104.4	783	14.0
1913	52,497	1164	1164	22.1	821	15.6	76	24	148	127.1	769	14.6
1914	52,530	1209	1209	23.0	848	16.1	69	22	148	122.4	801	15.2

	Census. 1911.	1914.
Area of District in acres (exclusive of area covered by water)	2,025	4,488
Total population at all ages... ..	46,420	*52,530
Number of families or separate occupiers ...	10,181	*10,723
Average number of persons per house... ..	4.4	*4.8

* Estimated.

The following public and other Institutions are within the City:—

The Union Workhouse and its Infirmary.
The Cumberland Infirmary.
Carlisle Non-Provident Dispensary.
The Crozier Lodge Isolation Hospital.
Strathclyde House (Home for Incurables).
St. Joseph's Home (aged and infirm persons).
Chadwick Memorial (Industrial School).
Corporation Dispensary and School Clinic.

The following table sets out the Cause of and the Ages at Death of 801 persons belonging to the City.

CAUSES OF DEATH.		NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.									TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESI- DENTS" IN INSTITUTIONS IN THE DISTRICT.
		All Ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and up- wards	
	1	2	3	4	5	6	7	8	9	10	11
All Causes	{ Certified ... Uncertified ...	776 25	139 9	24 ...	24 1	27 ...	34 ...	99 ...	177 6	252 9	215
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	2	...	...	...	1	1	...	...	...	...
Scarlet Fever	...	9	...	3	4	2	...	...	...	...	10
Whooping Cough	...	9	7	...	1	1	...	...	...	...	...
Diphtheria and Croup	...	3	...	...	2	...	...	...	1	...	1
Influenza	...	9	...	...	...	1	...	...	3	5	1
Erysipelas	...	1	...	...	...	...	...	1	...	...	1
Phthisis (Pulmonary Tuberculosis)	...	70	1	1	1	3	14	39	19	1	8
Tuberculous Meningitis	...	14	4	2	5	1	2	...	...	...	1
Other Tuberculous Diseases	...	18	3	1	...	3	4	5	1	1	7
Cancer, Malignant Disease	...	68	...	...	...	...	...	12	30	26	25
Rheumatic Fever	...	1	...	...	...	1	...	...	...	...	...
Meningitis	...	11	4	...	1	5	1	...	...	...	3
Organic Heart Disease	...	97	...	...	...	1	...	7	33	56	17
Bronchitis	...	37	8	1	...	...	...	2	5	21	2
Pneumonia (all forms)	...	56	14	8	4	3	...	4	10	13	9
Other Diseases of Respiratory Organs	...	6	...	...	2	...	...	1	1	2	3
Diarrhoea and Enteritis	...	30	25	2	1	...	1	...	...	1	2
Appendicitis and Typhlitis	...	4	...	...	1	...	...	2	...	1	5
Cirrhosis of Liver	...	2	...	...	...	...	...	...	1	1	4
Alcoholism	...	1	...	...	...	...	...	1	...	...	1
Nephritis and Bright's Disease	...	19	1	2	...	...	...	4	6	6	2
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...
Other Accidents and Diseases of Preg- nancy and Parturition	...	5	...	...	...	...	...	5	...	...	1
Congenital Debility & Malformation, Including Premature Birth	...	54	52	1	1	...	...	...	...	...	5
Violent Deaths, excluding Suicide	...	30	2	1	...	2	3	6	6	10	11
Suicide	...	12	...	...	...	...	1	3	4	4	3
Other Defined Diseases	...	227	26	2	2	3	7	16	59	112	91
Diseases ill-defined or unknown	...	6	1	...	...	...	...	...	4	1	2
Totals	...	801	148	24	25	27	34	99	183	261	215
ab- tries cluded above ures	Cerebro-spinal Meningitis	...	...	..	...	...	...	...	...	...	...
	Polionmyelitis	...	...	..	...	...	...	...	...	...	...
	Lobar Pneumonia	8	1	2	1	...	...	1	2	1	2
	Pneumonia not defined	29	6	3	2	2	...	1	6	9	6

The following table shows the gross Death-rate from 1881 to 1914 inclusive:—

Year.	Deaths from all causes.		Deaths from Principal Zymotic Diseases.	
	No. Registered.	Rate per 1000 of Population.	No. Registered.	Rate per 1000 of Population.
*1881	717	20.0	67	1.8
1882	852	23.6	189	5.0
1883	779	21.0	67	1.8
1884	783	21.0	38	1.0
1885	769	20.3	66	1.7
1886	745	19.4	62	1.6
1887	772	19.9	75	1.9
1888	722	18.5	59	1.5
1889	723	18.1	69	1.7
1890	792	19.5	65	1.6
*1891	789	20.1	63	1.6
1892	805	20.2	55	1.3
1893	868	21.6	145	3.6
1894	780	19.2	44	1.1
1895	794	19.4	33	0.8
1896	753	18.2	30	0.7
1897	811	19.4	54	1.3
1898	935	22.2	103	2.4
1899	818	19.2	42	0.9
1900	807	18.8	60	1.4
*1901	810	17.8	64	1.4
1902	856	18.5	82	1.7
1903	813	17.4	58	1.2
1904	933	19.7	63	1.3
1905	783	16.3	66	1.3
1906	811	16.7	34	0.7
1907	848	17.1	77	1.5
1908	713	14.2	42	0.8
1909	735	14.5	30	0.5
1910	683	13.2	21	0.4
*1911	776	16.7	96	2.06
†1912	813	17.5	81	1.7
1913	821	15.6	44	0.8
1914	848	16.1	51	0.9

*Census Years.

†Old City.

Statistics under the above heading for years previous to 1881 have been taken out to facilitate printing, for which see previous reports.

The following table shows the diseases causing the largest number of Deaths during 1914, and a comparison with those of 1913.

	1913.	1914.	Increase or Decrease
Pulmonary Tuberculosis & Phthisis ...	71	70	— 1
Tuberculous Peritonitis and Tabes Mesenterica }	4	4	...
Tuberculous Meningitis and Hydro- cephalus }	15	15	...
Cancer and Malignant Disease ...	63	68	+ 5
Prematurity and Injury at Birth ...	35	23	— 12
Old Age	50	62	+ 12
Syncope, Heart Disease (not specified)...	65	47	— 18
Valvular Disease of Heart	34	40	+ 6
Cerebral Hæmorrhage, Embolism, Thrombosis and Apoplexy }	51	57	+ 6
Pneumonia	51	54	+ 3
Bronchitis	40	37	-- 3
Kidney and Bladder Disease...	24	26	+ 2
Debility, Atrophy, Inanition, & Marasmus	18	20	+ 2
Measles	3	2	— 1
Diarrhœa	25	30	+ 5

+ Shows an increase in the number of deaths.

-- Shows a decrease in the number of deaths.

Table showing details of the Number and Nature of all Deaths of Persons belonging to the City during the year—*continued.*

CAUSE OF DEATH.	AGES.											TOTALS.
	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85 and upwards	
II.—LOCAL DISEASES— <i>continued.</i>												
4.— <i>Diseases of Blood Vessels.</i>												
Cerebral Hemorrhage. Embolism,	2	3	5	12	13	5	3	43
Thrombosis	1	2	2	6	3	..	14
<i>Apoplexy, Hemiplegia</i>	1	...	...	...	..	1
Aneurism	1	1
Senile Gangrene	1	...	...	..	1
Embolism, Thrombosis (not Cerebral)
Phlebitis
Varicose Veins
Blood Vessels, other Diseases...	1	5	..	1	7
5.— <i>Diseases of Respiratory Organs.</i>												
Laryngitis	1	...	...	...	...	...	...	...	..	1
Membranous Laryngitis (not
Diphtheritic)
<i>Croup (not Spasmod. or Membr.)</i>
Larynx and Trachea, other Diseases
Bronchitis	8	1	...	...	...	1	1	4	11	9	1	37
Emphysema, Asthma	2	...	..	2
Pleurisy	1	...	...	1	...	...	...	...	..	2
Fibroid Disease of Lung
Respiratory Diseases, other	1	...	...	...	..	1

Table showing details of the Number and Nature of all Deaths of Persons belonging to the City during the year—*continued.*

CAUSE OF DEATH.	AGES											TOTALS.	
	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85		85 and upwards
II.—LOCAL DISEASES— <i>continued.</i>													
10.— <i>Accidents of Childbirth.</i>													
Abortion, Miscarriage
Puerperal Mania
Puerperal Convulsions	2	...	...	...	...	...	...	...	2
Placenta Prævia, Flooding
Other Accidents of Pregnancy and Childbirth	2	1	...	...	...	...	...	...	3
11.— <i>Diseases of Bones and Joints.</i>													
Caries, Necrosis
Arthritis, Periostitis
Other Diseases of Locomotor System	1	...	...	...	...	...	...	1	...	...	2
12.— <i>Skin Diseases.</i>													
Ulcer, Bed sore
Eczema
Pemphigus
Skin Diseases, other
III.—DEATHS FROM VIOLENCE.													
1.— <i>Accident or Negligence.</i>													
Fractures and Contusions	2	...	2
Gunshot Wounds	1	...	...	...	...
Cut, Stab	2
Burn, Scald	1	...	...	...	1	...	...	...	...	1	...	3

INFANT MORTALITY.

This term is used as an interpretation of the mortality amongst infants under one year of age, and the mortality rate is calculated upon the number of deaths of such infants per 1,000 born during the same period.

The number of deaths of infants under one year during 1914 was 148, giving an Infant Mortality rate of 122.4 per 1,000.

The Infant Mortality rate for the whole of England and Wales during 1914 was 105 per 1,000 born; for the 97 great towns (of which Carlisle is one) 113 per 1,000; for the 145 smaller towns 104 per 1,000, and for England and Wales, less the 242 great and small towns, 93 per 1,000.

The death-rate of legitimate infants under one year of age was 108.5 per 1,000 legitimate births registered.

The death-rate of illegitimate infants under one year of age was 328.9 per 1,000 illegitimate births registered.

INFANT WELFARE, &c.

Notification of Births Act, 1907.

Summary of the Work carried out in connection therewith.

Number of live births notified by official letter card...	...	1199
Number of still births notified by official letter card ...	...	58
Number of births notified otherwise than by official letter card (all of which were live births) . .	...	28
Number of births in which the first notification was the Sub-Registrar's return ... ..	...	21
Total ... ..	...	<u>1306</u>
Number of Infant deaths under one year ... ..	...	148
Number of deaths from Diarrhoea under one year ... ..	...	25
Total number of primary visits made by the Health Visitor to houses ... ..	...	1419
Total number of re-visits ... ..	...	1596
Number of visits in respect of other conditions, principally Measles and Whooping Cough ... ..	...	21

PARTICULARS OF ENQUIRIES WITH RESPECT TO FEEDING.

Number of children fed entirely on the breast ... ..	...	873
" " " " by means of hygienic (boat-shaped) bottle	108	} 128
" " " " by means of long tubed bottle 20		
" " " " partly breast and partly bottle		20
" " " " by other means—Spoon (all premature)		3
" " " dying soon after birth and not fed		16
No information obtained ... ..	...	49

PARTICULARS SHOWING THE RELATION OF DEATHS TO FEEDING.

Number of deaths of breast-fed infants	49	or	5.6%	of breast-fed infants
„ „ bottle „ „	61	or	47.6%	of bottle-fed infants
„ „ infants fed by spoon	10			
Number of deaths of infants partly fed on breast and partly bottle	...	8		
No information	...	...	...	4
Number dying soon after birth and not fed	...	...	...	16
Total	...	...		148

CONDITION AS TO CLEANLINESS OF HOUSES VISITED.

Number of houses found to be clean	...	...	...	1162
„ „ „ moderately clean	...	...	...	88
„ „ „ dirty	...	...	...	4
Number of instances in which information was not obtainable	...	...	...	3
Houses not visited	...	...	...	49

INFANT MORTALITY.

St. Mary's Sub-District.

Nett Deaths from stated causes at various ages
under One Year of Age.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 weeks.	4 Weeks & under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under One Year.
All Causes.	Certified	...	..	17	8	4	3	32	15	9	7	6	69
	Uncertified	...	...	2	..	..	..	2	..	2	..	..	4
{	Small-pox	...	...	..	..	..	..	..	..	..	..	..	..
	Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..
{	Measles	...	...	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever	..	...	..	..	..	..	..	..	..	..	..	..
{	Whooping Cough	...	...	..	..	..	..	..	..	..	..	1	1
	Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..	..	..
{	Erysipelas	...	...	..	..	..	..	..	..	..	..	..	..
	Tuberculous Meningitis	...	...	..	..	..	..	..	2	1	..	..	3
{	Abdominal Tuberculosis	...	...	..	..	..	..	..	..	..	..	..	..
	Other Tuberculous Diseases	...	..	..	..	..	..	..	..	..	1	1	2
{	Meningitis (not Tuberculous)	...	...	..	..	..	..	..	..	1	1	..	2
	Convulsions	...	...	..	1	..	..	1	..	2	1	..	4
{	Laryngitis	...	...	..	..	..	..	..	..	..	..	..	..
	Bronchitis	..	...	..	1	..	1	2	1	..	1	1	5
{	Pneumonia (all forms)	...	...	..	..	..	..	..	3	1	2	2	8
	Diarrhœa	..	...	..	..	..	..	..	..	2	1	..	3
{	Enteritis	...	...	..	..	1	..	1	3	1	..	..	5
	Gastritis	...	...	..	..	..	..	..	..	..	..	..	..
{	Syphilis	...	...	..	..	..	1	1	..	..	..	1	2
	Rickets	...	...	..	..	..	..	..	..	1	..	..	1
{	Suffocation, overlying	...	...	..	..	..	..	..	1	..	..	..	1
	Injury at Birth	...	...	..	..	..	..	..	..	..	..	..	..
{	Atelectasis	...	...	..	1	..	..	1	..	..	..	..	1
	Congenital Malformations	...	...	3	1	..	..	4	2	..	..	..	6
{	Premature Birth	..	...	9	3	1	1	14	..	..	..	..	14
	Atrophy, Debility & Marasmus	...	...	5	1	1	..	7	2	1	..	..	10
{	Other Causes	...	...	2	..	1	..	3	1	1	..	..	5
	Totals	...	...	19	8	4	3	34	15	11	7	6	73

Nett Births in the	{	Legitimate, 576.
year.		Illegitimate, 25.

Nett Deaths in the year of

{	Legitimate Infants, 65.
{	Illegitimate „ 8.

INFANT MORTALITY. St. Cuthbert's Sub-District.

Nett Deaths from stated causes at various ages
under One Year of Age.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under One Year.
All Causes	Certified ...	...	...	10	5	2	5	22	14	13	10	7	66
	Uncertified ..	..	..	1	..	..	..	1	1	2	1	..	5
{	Small-pox	...	...	..	..	..	..	..	..	..	..	..	..
	Chicken-pox	...	...	..	..	..	..	..	..	..	..	..	..
{	Measles	...	...	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..
{	Whooping Cough	..	..	..	..	..	1	1	1	1	2	1	6
	Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..	..	..
{	Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..
	Tuberculous Meningitis	...	..	..	..	..	..	..	..	..	1	..	1
{	Abdominal Tuberculous	...	..	..	..	..	..	..	..	..	..	..	..
	Other Tuberculous Diseases	...	..	..	..	..	..	..	..	..	..	1	1
{	Meningitis (<i>not Tuberculous</i>)	..	..	..	..	..	..	..	..	..	1	1	2
	Convulsions	...	..	1	1	..	..	2	1	2	1	..	6
{	Laryngitis	..	..	..	..	..	..	..	..	..	..	..	..
	Bronchitis	...	..	..	..	..	..	..	1	1	..	..	2
{	Pneumonia (all forms)	...	..	..	..	..	..	..	..	2	2	2	6
	Diarrhœa	..	..	..	..	..	1	1	2	4	2	1	10
{	Enteritis	...	..	..	..	..	1	1	..	3	1	..	5
	Gastritis	...	..	..	..	..	..	..	..	..	..	..	..
{	Syphilis	...	..	..	..	..	..	..	3	..	..	..	3
	Rickets	...	..	..	..	..	..	..	..	1	..	..	1
{	Suffocation, overlying	...	..	..	..	..	..	..	1	..	..	..	1
	Injury at Birth	...	..	..	..	..	..	..	..	..	..	..	..
{	Atelectasis	..	..	1	..	..	..	1	..	..	..	..	1
	Congenital Malformations	...	..	..	..	..	..	..	2	..	..	..	2
{	Premature Birth	...	..	7	1	1	..	9	..	..	..	..	9
	Atrophy, Debility, & Marasmus	...	..	1	1	1	2	5	2	1	..	..	8
{	Other Causes	...	..	1	2	..	..	3	2	..	1	1	7
	Totals	...	...	11	5	2	5	23	15	15	11	7	71
Nett Births in the year				{ Legitimate, 509. Illegitimate, 51.				Nett Deaths in the year of				{ Legitimate Infants, 55. Illegitimate „ 16.	

INFANT MORTALITY.

Stanwix Sub-District.

Nett Deaths from stated causes at various ages
under One Year of Age.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks & under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under One Year.
All Causes	Certified	...	...	...	...	...	...	...	1	...	1	1	3
	Uncertified	...	...	...	...	...	...	...	...	...	...	...	...
{	Small-pox	...	...	...	...	...	...	...	...	...	...	...	...
	Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...
{	Measles	...	...	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...
{	Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...
	Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...	...
{	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...
	Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...	...
{	Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	1	...	...	1
{	Meningitis (<i>not Tuberculous</i>)	...	...	...	...	...	...	...	...	...	...	...	...
	Convulsions	...	...	...	...	...	...	...	...	...	...	...	...
{	Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...
	Bronchitis	...	...	...	...	...	...	...	...	...	1	...	1
{	Pneumonia (all forms)	...	...	...	...	...	...	...	...	...	...	...	...
	Diarrhoea	...	...	...	...	...	...	...	...	...	...	...	...
{	Enteritis	...	...	...	...	...	...	...	...	...	...	...	...
	Gastritis	...	...	...	...	...	...	...	...	...	...	...	...
{	Syphilis	...	...	...	...	...	...	...	...	...	...	...	...
	Rickets	...	...	...	...	...	...	...	...	...	...	...	...
{	Suffocation, overlying	...	...	...	...	...	...	...	...	...	...	...	...
	Injury at Birth	...	...	...	...	...	...	...	...	...	...	...	...
{	Atelectasis	...	...	...	...	...	...	...	...	...	...	...	...
	Congenital Malformations	...	...	...	...	...	...	...	...	...	...	...	...
{	Premature Birth	...	...	...	...	...	...	...	...	...	...	...	...
	Atrophy, Debility, & Marasmus	...	...	...	...	...	...	...	1	...	...	...	1
{	Other Causes	...	...	...	...	...	...	...	...	...	...	...	...
	Totals	...	...	...	...	...	...	...	1	...	1	1	3
Nett Births in the year.				{ Legitimate, 43 Illegitimate 0		Nett Deaths in the year of				{ Legitimate Infants, 2. Illegitimate „ 1.			

INFANT MORTALITY.

Dalston Sub-District.

Nett Deaths from stated causes at various Ages
under One Year of Age.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks & under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under One Year.
All Causes	Certified ..	...	...	1	..	..	..	1	..	..	..	..	1
	Uncertified ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Small-pox ...	...	...	..	..	..	..	..	..	..	..	..	..
	Chicken-pox ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Measles ...	...	...	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Whooping Cough ...	...	...	..	..	..	..	..	..	..	..	..	..
	Diphtheria and Croup ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Erysipelas ...	...	...	..	..	..	..	..	..	..	..	..	..
	Tuberculous Meningitis ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Abdominal Tuberculosis ...	...	...	..	..	..	..	..	..	..	..	..	..
	Other Tuberculous Diseases ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Meningitis (<i>not Tuberculous</i>) ...	...	...	..	..	..	..	..	..	..	..	..	..
	Convulsions ..	...	...	..	..	..	..	..	..	..	..	..	..
{	Laryngitis ...	...	...	..	..	..	..	..	..	..	..	..	..
	Bronchitis ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Pneumonia (all forms) ...	...	...	..	..	..	..	..	..	..	..	..	..
	Diarrhoea ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Enteritis ...	...	...	..	..	..	..	..	..	..	..	..	..
	Gastritis ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Syphilis ...	...	...	..	..	..	..	..	..	..	..	..	..
	Rickets ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Suffocation, overlying ...	...	...	..	..	..	..	..	..	..	..	..	..
	Injury at Birth ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Atelectasis ...	...	...	..	..	..	..	..	..	..	..	..	..
	Congenital Malformations ...	...	...	..	..	..	..	..	..	..	..	..	..
{	Premature Birth ...	...	...	..	..	..	..	..	..	..	..	..	..
	Atrophy, Debility, & Marasmus ...	...	...	1	..	..	..	1	..	..	..	..	1
{	Other Causes ...	...	...	..	..	..	..	..	..	..	..	..	..
	Totals ...	...	...	1	..	..	..	1	..	..	..	..	1
Nett Births in the year.				Legitimate, 4. Illegitimate, 0.				Net Deaths in the year of				Legitimate Infants, 1. Illegitimate ,, 0.	

INFANT MORTALITY.

Wetheral Sub-District.

Nett Deaths from stated causes at various Ages
under One Year of Age.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks & under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under One Year.
All Causes	{ Certified	...	...	..	..	..	..	..	..	..	..	..	..
	{ Uncertified	...	...	..	..	..	..	..	..	..	..	..	..
{	Small-pox	...	...	...	...	...	...	...	...	..	..	..	...
{	Chicken-pox	...	...	...	...	...	...	..	..	..	..	..	...
{	Measles	..	...	...	...	...	...	..	..	..	..	..	...
{	Scarlet Fever	..	...	...	...	...	...	..	..	..	..	..	...
{	Whooping Cough	..	...	...	...	...	...	..	..	..	..	..	...
{	Diphtheria and Croup	...	...	...	...	...	...	..	..	..	..	..	...
{	Erysipelas...	...	...	...	...	...	...	..	..	..	..	..	...
{	Tuberculous Meningitis	...	...	...	...	...	...	..	..	..	..	..	...
{	Abdominal Tuberculosis	...	...	...	...	...	...	..	..	..	..	..	...
{	Other Tuberculous Diseases	...	...	...	...	...	...	..	..	..	..	..	...
{	Meningitis (<i>not Tuberculous</i>)	...	...	...	...	...	...	..	..	..	..	..	...
{	Convulsions	...	...	...	...	...	...	..	..	..	..	..	...
{	Laryngitis...	...	..	...	...	...	..	..	..	..	..	..	...
{	Bronchitis	...	..	...	...	...	..	..	..	..	..	..	...
{	Pneumonia (all forms)	...	..	...	...	...	...	..	..	..	..	..	...
{	Diarrhoea ..	...	...	...	...	...	...	..	..	..	..	..	...
{	Enteritis	...	...	...	...	...	...	..	..	..	..	..	...
{	Gastritis	...	...	...	...	...	..	..	..	..	..	..	...
{	Syphilis	...	...	...	...	...	..	..	..	..	..	..	...
{	Rickets	..	...	...	..	..	..	..	..	..	..	..	...
{	Suffocation, overlying	...	...	...	...	...	...	..	..	..	..	..	...
{	Injury at Birth	...	...	...	...	...	...	..	..	..	..	..	...
{	Atelectasis	...	...	...	...	...	...	..	..	..	..	..	...
{	Congenital Malformations	...	...	...	...	...	...	..	..	..	..	..	...
{	Premature Birth	...	...	...	...	...	...	..	..	..	..	..	...
{	Atrophy, Debility, & Marasmus	...	...	...	...	...	...	..	..	..	..	..	...
{	Other Causes	...	..	...	...	...	...	..	..	..	..	..	...
Totals				...	...	...	...	...	..	...	...	...	...
Nett Births in the year.				{ Legitimate, 1. Illegitimate 0.		Nett Deaths in the year of				{ Legitimate Infants 0. Illegitimate „ 0.			

Details of the number of Deaths of Infants under one year of age for the years 1913 and 1914, respectively.

Cause of Death.				1913	1914
Premature Birth	...	...	...	33	23
Diarrhœa	...	...	...	22	25
Atrophy, Debility, Inanition, Marasmus	...	...	...	15	19
Bronchitis	...	...	...	12	8
Pneumonia	...	...	...	9	14
Convulsions	...	...	...	8	10
Tuberculous Meningitis	...	...	...	6	4
Meningitis (not Tuberculous)	...	...	...	3	4
Tuberculous Peritonitis	...	...	...	3	1
Atelectasis	...	...	...	4	2
Whooping Cough	...	...	...	4	7
Congenital Defects	...	...	...	3	8
Diphtheria	...	...	...	3	...
Gastritis	...	...	...	3	1
Syphilis	...	...	...	3	5
Injury at Birth	...	...	...	2	...
Suffocation	...	...	...	2	2
Influenza	...	...	...	1	...
Phthisis	...	...	...	1	1
Rickets	...	...	...	...	2
Hydrocephalus	...	...	...	1	...
Tubercular Disease of Mastoid	...	...	...	1	1
Tubercular ulceration of Intestine	...	...	...	1	...
Jaundice	...	...	...	1	1
Want of Breast Milk	...	...	...	1	...
Defective formation of Spine	...	...	...	1	...
Paraplegia	...	...	...	1	...
Poliomyelitis	...	...	...	1	...
Cyanosis	...	...	...	1	...
Bronchial Catarrh	...	...	...	1	...
Hernia	...	...	...	...	2
Intestinal Obstruction	...	...	...	...	1
Nephritis	...	...	...	...	1
Status Lymphaticus	...	...	...	...	1
Tuberculous Abscess	...	...	...	...	1
Tuberculosis of Intestines	...	...	...	...	1
Oidium Albicans	...	...	...	...	2
Other Causes	...	...	...	1	1
Totals	...	...	...	148	148

Distribution of Deaths of Infants under
one year in the several Sub-Registration
Districts.

Whole District	...	...	...	<div> <div>Legitimate</div> <div>123</div> </div> <div> <div>Illegitimate</div> <div>25</div> </div>	148
St. Mary's Sub-Registration District	...	...	...	<div> <div>Legitimate</div> <div>65</div> </div> <div> <div>Illegitimate</div> <div>8</div> </div>	73
St. Cuthbert's Sub-Registration District	...	...	...	<div> <div>Legitimate</div> <div>55</div> </div> <div> <div>Illegitimate</div> <div>16</div> </div>	71
Stanwix Sub-Registration District	...	...	...	<div> <div>Legitimate</div> <div>2</div> </div> <div> <div>Illegitimate</div> <div>1</div> </div>	3
Dalston Sub-Registration District	...	...	...	<div> <div>Legitimate</div> <div>1</div> </div> <div> <div>Illegitimate</div> <div>0</div> </div>	1
Wetheral Sub-Registration District	...	...	...	Nil.	...

Deaths of Infants under One Year of age
showing Occupation of Parents.

Legitimate.

Labourer	...	..	...	...	48
Railway Employee	...	...	...	...	25
Joiner, Painter, Plumber, and Fitter...	...	...	...	...	10
Warehouseman and Factory Worker	...	...	...	...	6
Engineer	...	...	...	...	5
Clerk and Accountant	...	...	...	...	4
Ironmonger and Blacksmith	...	...	...	...	3
Butcher	...	...	...	...	3
Bricklayer	...	...	...	...	3
Hotel Proprietor, Barman	...	...	...	...	3
Schoolmaster	...	...	...	...	2
Compositor	...	...	...	...	2
Carter, Groom	...	...	...	...	2
Tailor	...	...	...	...	1
Shoemaker	...	...	...	...	1
Police Constable	...	...	...	...	1
Window Cleaner	...	...	...	...	1
Vergar	...	...	...	...	1
Soldier	...	...	...	...	1
Chemist...	...	...	...	...	1
					123

Illegitimate.

Occupation of Mother.					Numbers.
Factory Worker	...	...	...	...	8
Domestic Servant	...	...	...	...	7
Shop Assistant	...	...	...	...	4
No Occupation	...	...	...	...	6
Total					25

Table showing the population, births, birth-rate, and infant mortality rates for a series of years, 1884-1914.

Year.	Population.	No. of Births.	Rate per 1000.	Infant Death-Rate per 1000 births.
1884	37,285	1303	35.0	158
1885	37,881	1285	34.0	164
1886	38,402	1262	33.0	146
1887	38,793	1214	31.3	141
1888	39,027	1307	33.5	129
1889	39,944	1224	30.6	142
1890	40,500	1215	30.0	150
*1891	39,200	1207	30.8	137
1892	39,750	1213	30.5	123
1893	40,150	1389	34.5	178
1894	41,022	1315	32.0	133
1895	41,658	1311	31.4	142
1896	42,294	1246	29.6	137
1897	42,930	1324	30.8	134
1898	43,566	1311	30.0	183
1899	44,202	1300	29.4	145
1900	44,838	1354	30.1	134
*1901	45,478	1246	27.3	129
1902	46,078	1245	27.0	117
1903	46,500	1322	28.4	118
1904	47,350	1278	26.7	152
1905	47,920	1168	24.3	139
1906	48,425	1227	25.3	132
1907	49,400	1178	23.8	143
1908	50,047	1223	24.4	129
1909	50,675	1149	22.6	123.6
1910	51,433	1145	22.2	110.0
*1911	46,432	1109	23.8	145.0
†1912	46,420	1142	24.6	102.4
1913	52,497	1164	22.1	127.1
1914	52,530	1209	23.0	122.4

*Census Population.

†Old City.

Table showing population and rates from principal
in England and Wales

NAME OF TOWN.	Population.	Birth-Rate.	Death-Rate. (after correc- tion for Non- Residents.)	Infant Mortality Rate.
Accrington	45,775	19.31	13.98	117.64
Acton	61,000	24.6	11.9	91.0
Ashton-under-Lyne	45,179	23.7	18.4	183.0
Barrow-in-Furness	68,523	28.7	14.6	104.6
Barnsley	54,000	30.51	17.77	155.6
Bath	70,292	15.3	11.25	59.0
Blackpool	66,864	14.47	13.76	110.0
Bootle	73,230	31.7	17.9	123.0
Burton-on-Trent	48,000	21.79	13.14	90.0
Crewe	45,964	22.4	12.24	89.0
Darlington	59,500	27.1	13.75	99.9
Dewsbury	54,082	23.9	15.9	113.7
Eastbourne	54,500	15.35	9.55	59.7
Enfield	60,682	21.83	10.32	80.75
Gillingham	54,641	22.7	12.5	99.6
Gloucester	50,759	25.4	13.46	90.27
Grimsby	78,670	26.93	14.65	131.0
Lancaster	38,593	20.49	13.19	86.0
Newport (Mon.)	89,404	25.44	13.28	122.2
Oxford	54,348	16.8	11.17	72.4
Reading	90,083	20.19	11.47	88.5
Stockton-on-Tees	59,311	30.5	18.16	121.0
Swindon	53,000	22.5	11.5	74.3
Tynemouth	61,408	28.26	16.4	132.0
Wallasey	85,000	21.7	13.2	90.0
West Hartlepool	65,000	29.1	15.9	111.4
Wigan	92,868	29.18	17.09	139.0
Wimbledon	59,598	18.6	10.1	69.0
York	83,802	22.7	13.5	118.0
CITY OF CARLISLE	52,530	23.0	15.5	122.4

causes of death in a number of Towns compared with Carlisle.

Zymotic Death-Rate.	Respiratory Diseases, Death-Rate (other than Phthisis).	Phthisis Death-Rate.	Other Tuberculous Diseases, Death-Rate.	Malignant Diseases, Death-Rate.
1.09	2.40	0.87	0.48	1.07
0.85	0.2	0.85	0.2	0.9
3.3	3.8	1.2	0.4	0.7
0.94	2.03	0.91	0.56	0.72
2.93	2.92	1.00	0.70	0.74
0.28	1.89	0.90	0.30	1.27
0.4	2.00	1.04	0.3	1.41
2.31	3.81	1.17	0.37	0.94
—	1.98	1.10	0.29	1.08
0.69	2.21	0.73	0.2	0.97
1.41	1.97	1.01	0.40	1.16
1.2	2.7	1.13	0.26	1.02
0.40	0.89	0.57	0.27	1.26
0.87	1.13	0.79	0.14	1.00
0.8	0.8	1.2	0.2	0.8
0.65	2.21	0.89	0.27	1.04
1.84	2.27	0.86	0.35	1.24
0.46	1.81	1.39	0.32	0.93
1.40	2.41	1.15	0.24	0.97
0.53	1.9	0.94	0.2	1.37
0.39	2.09	1.08	0.33	1.20
1.9	3.3	1.3	0.7	1.1
0.52	0.26	0.98	0.07	0.88
1.54	2.99	1.22	0.63	0.81
0.8	2.3	0.7	0.27	1.2
0.6	1.9	1.1	0.6	0.9
2.38	4.13	0.95	0.31	0.64
0.75	1.4	0.68	0.11	0.93
1.33	1.61	0.95	0.42	1.01
1.0	1.8	1.3	0.6	1.2

ZYMOTIC DISEASES.

(Syn. Infectious Diseases.)

The total number of cases of Infectious Disease (excluding Tuberculosis, which is contained elsewhere in this Report) notified during the year was 376, an increase of 105 over the number notified during 1913.

The notifiable diseases to which the Infectious Disease Notification Acts and Regulations now apply are as follows :— Smallpox, Cholera, Diphtheria, Membranous Croup, Erysipelas, Cerebro-spinal Meningitis, Acute Poliomyelitis, Scarlatina or Scarlet Fever, Typhus Fever, Enteric or Typhoid Fever, Relapsing, Continued, or Puerperal Fever, Ophthalmia Neonatorum, and Tuberculosis.

The term Zymotic death-rate is applied to the aggregate death-rate from Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever (Typhus, Simple Continued, and Enteric), and Diarrhœa.

The number of deaths from Zymotic Disease registered was 53, which, calculated upon the estimated population (52,530), gives a death-rate of 1.0 per 1,000.

The causes of death were registered as follows :—

Diarrhœa	...	...	...	30
Diphtheria	...	...	...	3
Scarlet Fever	...	...	...	9
Whooping Cough	...	...	...	9
Measles	...	...	...	2
				—
Total			...	53
				—

The number of deaths from Zymotic Disease in 1912 and 1913 was 81 and 44 respectively.

Table showing the number and nature of Infectious Disease at the several age groups notified in the several Sub-Registration Districts.

NOTIFIABLE DISEASE.	Number of Cases Notified.								Total Cases Notified in each Locality.				TOTAL CASES REMOVED TO HOSPITAL.
	At all ages.	At Ages—Years.							St. Mary's Sub- District.	St. Cuthbert's Sub-District.	Stanwix Sub- District.	Dalston Sub- District.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.					
Smallpox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera, Plague ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (in- cluding Mem- branous Croup) }	44	...	12	17	5	9	1	..	22	18	4	...	31
Erysipelas	57	2	2	3	8	20	16	6	31	23	3	...	1
Scarlet Fever	250	1	81	155	10	3	...	...	104	144	2	...	196
Typhus Fever ... ..	...	...	...	...	...	...	...	...	..	..	...	...	...
Enteric Fever	2	...	...	...	...	2	...	...	2	..	...	..	1
Relapsing Fever, Continued Fever ... ..	...	...	...	..	...	...	...	...	..	...	...	...	...
Puerperal Fever	1	...	...	...	...	1	..	..	...	1	...	...	...
Cerebro-spinal Meningitis .	...	...	...	...	..	...	...	...	..	...	...	...	...
Poliomyelitis	2	...	2	...	...	..	...	...	...	2	...	...	..
Ophthalmia Neonatorum ...	20	20	...	...	...	..	..	...	11	9	...	...	...
Pulmonary Tuberculosis ...	231	3	4	94	52	51	24	3	121	100	8	2	...
Other forms of Tuberculosis	56	6	11	15	16	6	1	1	25	18	11	2	..
Totals	663	32	112	284	91	92	42	10	316	315	28	4	229

Isolation Hospital or Hospitals, Sanatoria, &c.

Crozier Lodge, Newtown, Carlisle—Total Available Beds 50

Smallpox Hospital, Belle Vue „ „ „ 12

Number of Diseases which can be concurrently treated, 5

Table showing the number of notifications of Infectious Diseases during each of the quarters of the year.

Notifiable Disease.	Number of Notifications sent in during				Totals.
	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	
Scarlet Fever	42	64	75	69	250
Diphtheria (including Membranous Croup)	14	14	10	6	44
Erysipelas	15	12	14	16	57
Enteric (or Typhoid) Fever	..	...	2	...	2
Typhus Fever ... ..	...	...	...	...	...
Smallpox ... ..	...	...	...	..	...
Puerperal Fever ... ..	...	...	1	...	1
Acute Poliomyelitis ... ..	...	...	1	1	2
Ophthalmia Neonatorum	...	6	10	4	20
Totals	71	96	113	96	376

Table showing the total number of notifications of each class of notifiable Infectious Diseases, 1912, 1913, and 1914.

Notifiable Disease.	1912†	1913	1914
Scarlet Fever	109	159	250
Diphtheria (including Membranous Croup)	47	52	44
Erysipelas	76	51	57
Enteric (or Typhoid) Fever	2	5	2
Typhus Fever	9	...	...
Smallpox ... ..	...	...	...
Puerperal Fever	7	1	1
Acute Poliomyelitis	2	3	2
Ophthalmia Neonatorum	...	...	20
Totals	252	271	376

† Old city.

Table showing the total number of Deaths from the principal Infectious Diseases, including Diarrhoea and Dysentery, 1909-1914, inclusive.

Year	1909	1910	1911	1912†	1913	1914
Total number of deaths ...	30	21	96	81	44	53

† Old city.

Table showing the Number and Nature of the Deaths from the principal Zymotic Diseases, 1903 to 1914 inclusive.

NOTIFIABLE DISEASE.	1903	1904	1905	1906	1907	1908	1909	1910	1911	*1912	1913	1914
Smallpox	4	...	...	...	...	...	...	...	...	..	...	...
Measles.....	3	7	17	1	54	...	11	3	13	38	3	2
Scarlet Fever	5	3	5	9	6	1	6	2	2	2	...	9
Diphtheria	20	14	6	5	3	4	4	2	4	6	9	3
Whooping Cough.....	20	20	11	5	11	23	8	11	21	18	7	9
Fever { Typhus Enteric or Typhoid Simple continued	...	...	5	...	...	...	1	...	...	2	...	...
	3	3	3	1	...	...	..	...	...	1	..	...
Diarrhoea	3	16	19	13	3	14	...	3	56	14	25	30
Totals.....	58	63	66	34	77	42	30	21	96	81	44	53
Rate per 1,000 of population	1.2	1.3	1.3	0.7	1.5	0.84	0.5	.40	2.06	1.7	0.8	1.0

* Old City.

Table showing the several localities where Deaths from the principal Zymotic Diseases occurred :—

LOCALITY.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria	Typhus Fever.	Enteric (or Typhoid) Fever.	Diarrhoea.	Totals
Warwick Square	1	1
Milbourne Crescent	1	1
Milbourne Street	3	3
Infirmary	1	1
Fever Hospital	10	..	1	..	..	..	11
Monkscløse Road	1	..	..	..	1
Dacre Street...	1	..	..	..	..	1
Bridge Lane	1	1
Peter Street	1	1
Head Street	1	1
Lewthwaite's Square	1	1
Queen Street	1	..	..	..	..	1
Denton Street	1	..	..	..	..	..	..	1
Bowman Street	1	1
Sebergham Terrace	1	1
Boundary Road	2	..	..	..	..	2
Robert Street	1	1
Oswald Street	1	..	..	..	..	1
Harraby Green Road	1	1
Edward Street	1	1
Crown Street	1	..	..	..	1	2
Harrison Street	2	..	..	..	..	2
South John Street	1	1
Upperby	1	1
Sowerby Street	1	1
King Street	1	1
Brook Street	1	..	..	..	1	2
Union Street...	2	2
Irving's Lane	1	1
Water Street	2	2
Margaret Street	1	1
Currock Street	1	1
Millholme Avenue	1	1
William Street	1	1
Scotland Road	1	..	..	..	1
Totals	1	10	9	3	..	..	30	53

SCARLET FEVER.

(Syn. Scarlatina.)

The number of cases of Scarlet Fever notified or brought to my notice by other means during 1914 was 251, being an increase of 87 on the figure for 1913.

Of the 251 cases thus recorded, 196, or 78.0 per cent., were isolated in Hospital.

19 of the cases notified occurred in public and other institutions in the city.

9 deaths were registered from this disease during the year.

During 1913, no deaths were registered from this disease.

Out of the 251 cases notified as Scarlet Fever, 1 was found not to be suffering from the disease, but was suffering from a drug rash.

RETURN CASES OF SCARLET FEVER.

10 cases of Scarlet Fever occurred in houses to which a patient recently isolated in Hospital had returned, as shown in the following table:—

Address.	Date of Notification of first case.	Date of Discharge of first case from Hospital.	Date of Notification of second case or cases at the same house.
The Castle	1913. 8th Nov.	1914. 10th Jan.	1914. 22nd Jan.
Milbourne Crescent	1914. 9th Feb.	30th March	15th April
Cameron's Square, Lord Street...	3rd Sept.	21st Oct.	28th Oct.
Lorne Crescent	5th Sept.	21st Oct.	28th Oct. 4th Nov. 6th Nov.
Charles Street	25th Sept.	4th Nov.	9th Nov. 28th Nov.
Botchergate	19th Oct.	12th Dec.	19th Dec.
William Street	10th Sept.	17th Dec.	28th Dec.

Table showing simultaneous and secondary cases of Scarlet Fever in the same house or Institution :—

Address.	Date of Notification of first case or cases.	Date of Notification of a second or more cases in the same house.	Whether isolated in Hospital or not.
Backhouse Walk...	5th Jan., 1914	8th Jan., 1914	Yes
Montreal Street ...	12th Feb., 1914	10th April, 1914	Yes
Harraby Hill House	7th March, 1914	8th March, 1914	Yes
		8th " "	Yes
		14th " "	Yes
		23rd " "	Yes
Adelphi Terrace ...	12th March, 1914	26th May, 1914	Yes
		26th " "	Yes
		9th June, 1914	Yes
Nelson Street ...	23rd March, 1914		Yes
	23rd " "		Yes
Burns Street ...	6th April, 1914		Yes
	6th " "		Yes
Warwick Road ...	20th " "	28th April, 1914	No
		28th " "	No
Granville Road ...	27th April, 1914		Yes
		28th July, 1914	Yes
South Street ...	21st May, 1914	12th June, 1914	Yes
		5th Nov., 1914	Yes
Charles Street ...	8th June, 1914	19th " "	Yes
South Street ...	9th " "		Yes
	9th " "		Yes
Boundary Terrace	11th " "	21st Aug., 1914	1st case not isolated 2nd case isolated
Clift Street ...	13th " "		No
	13th " "		No
Charles Street ...	16th " "		Yes
	16th " "		Yes
Greystone Road ...	16th " "		Yes
	16th " "		Yes
Barrock Street ...	24th " "		Yes
	24th " "		Yes
Stoney Holme Cottages	24th Aug., 1914	12th Nov., 1914	1st case isolated
		16th " "	2nd case not isolated 3rd case not isolated
Warwick Road ..	26th Aug., 1914		No
	26th " "		No
Atkinson's Square,	2nd Sept., 1914	7th Sept., 1914	Yes
King Street	2nd " "		Yes
Lorne Crescent ...	5th " "	29th Oct., 1914	1st case isolated
		4th Nov., 1914	2nd, 3rd, & 4th cases not isolated
		6th " "	

Table showing simultaneous and secondary cases of Scarlet Fever in the same house or Institution (*Continued*) :—

Address.	Date of Notification of first case or cases.	Date of Notification of a second or more cases in the same house.	Whether isolated in Hospital or not.
Gamma Court,	3rd Sept., 1914		Yes
William Street	3rd " "		Yes
Eldred Street ...	19th " "	21st Sept., 1914	No
Flower Street ...	23rd " "	24th " "	Yes
Charles Street ...	25th " "	26th Nov., 1914	Yes
Adelaide Street ...	29th " "	2nd Oct., 1914	1st case isolated 2nd case not isolated
William Street ..	19th Oct., 1914	27th " "	Yes
Oswald Street ...	22nd " "	29th " "	No
	22nd " "		No
Denton Street ...	26th " "	29th " "	Yes
Cumberland Street	6th Nov., 1914	13th Nov., 1914	Yes
Court Street ...	16th " "		No
	16th " "		No
Graham Street ...	17th " "	26th " "	Yes
Trafalgar Street ...	17th " "		Yes
	17th " "		Yes
Cumberland Infirmary	24th August to 27th October, 12 cases		All the cases were removed to hospital

Table showing number of notifications, number of cases isolated, number of deaths, and death-rates per 1,000 of population at all ages, 1908-1914.

Year.	No. of cases notified.	No. of cases isolated in Hospital.	No. of deaths.	Death-rate per 1,000 of population.
1908	29	56	...	...
1909	119	87	6	.11
1910	248	171	2	.03
1911	139	104	2	.04
1912	110	101	2	.04
1913	164	131	2	.04
1914	251	196	9	.17

Table giving name of school attended and number of cases in which a school child was infected with Scarlet Fever, 1911 to 1914 inclusive.

			1911	1912	1913	1914
			<hr/>	<hr/>	<hr/>	<hr/>
Ashley Street	...	...	8	16	12	14
Bishop Goodwin	...	...	9	1	37	13
Brook Street	...	...	4	6	6	16
Caldewgate	...	...	14	12	6	12
Christ Church	...	...	2	5	2	23
Denton Holme	...	...	3	1	5	8
Fawcett ...	...	...	4	0	7	2
Higher Grade	...	...	1	1	1	2
Holy Trinity	...	...	1	3	0	5
Lowther Street	...	...	2	3	3	4
Norman Street	...	...	7	2	8	20
Robert Ferguson	...	...	2	2	6	11
St. Bede's	...	...	2	2	1	6
St. Cuthbert's	...	...	5	4	2	5
St. John's	...	...	3	2	1	13
St. Patrick's	...	...	0	2	1	4
St. Stephen's	...	...	7	0	7	1
Botcherby	...	...	0	0	0	1
Stanwix	...	...	0	0	0	2
Upperby	...	...	0	0	0	1
Belle Vue	...	...	0	0	0	0
Private Schools	...	...	6	1	1	2
			<hr/>	<hr/>	<hr/>	<hr/>
			80	63	106	165
			<hr/>	<hr/>	<hr/>	<hr/>

DIPHTHERIA.

(Including Membranous Croup.)

The number of cases of Diphtheria notified during 1914 was 52, as against 57 during 1913 and 47 during 1912.

Of this number, 24 occurred in St. Mary's, 23 in St. Cuthbert's, and 5 in Stanwix Sub-Registration Districts respectively.

Two of the cases were notified by the military authorities, viz., at the Castle and at the Camp on the Swifts respectively.

Out of the 52 cases notified, 8 were found to be suffering from a disease other than Diphtheria, viz. :—

Follicular Tonsilitis	...	...	4
Scarlet Fever	...	...	3
Vincent's Angina	...	...	1
			—
			8
			—

During 1914, 3 deaths were registered as due to Diphtheria, the death-rate being equal to .05 per 1000 of the estimated population, or 5.7 per cent. of the cases notified.

Of the 52 cases, 31, or 56.9 per cent., were removed to the Isolation Hospital.

No return case occurred during the year.

Table showing number of notifications, number of cases isolated, number of deaths, and death-rates per 1,000 of population at all ages, 1908-1914.

Year.	No. of cases notified.	No. of cases isolated in Hospital.	No. of deaths.	Death-rate per 1,000 of population.
1908	31	20	4	.07
1909	36	18	4	.07
1910	37	27	2	.03
1911	44	33	4	.08
1912	47	33	6	.17
1913	57	42	9	.17
1914	52	31	3	.05

Table showing localities of cases notified as Diphtheria during the year, with action taken thereon :—

Date.	Locality.	Insanitary conditions present	Action taken.
1914			
8th Jan.	Newtown	Privy Closet	Removed to Isolation Hospital and subsequent disinfection
12th „	Story's-ct., Duke-st.	None	Do.
20th „	Colville Street	Do.	Do.
27th „	South-Western Terrace	Do.	Isolated at home and subsequent disinfection
9th Feb.	Dale Street	Do.	Removed to Isolation Hospital and subsequent disinfection
19th „	Greystone Road	Do.	Do.
25th „	Warwick Road	Do.	Do.
2nd Mar.	Abbey Street	Rooms damp and dilapidated	Do.
19th „	Brewery Row	None	Do.
19th „	Ruthella Street	Do.	Do.
23rd „	Melbourne Road	Do.	Do.
29th „	Burlington Place	Do.	Isolated at home and subsequent disinfection
30th „	Scotland Road	Do.	Removed to Isolation Hospital and subsequent disinfection
31st „	Granville Road	Do.	Isolated at home and subsequent disinfection
1st Apr.	Myddleton Terrace	Do.	Removed to Isolation Hospital and subsequent disinfection
14th „	Orfeur Street	Do.	Died, subsequent disinfection
25th „	Abbey Street	Do.	Isolated at home and subsequent disinfection
2nd May	Clifford Street	Do.	Removed to Isolation Hospital and subsequent disinfection
20th „	Tilbury Road	Privy	Do.
22nd „	Edward Street	None	Do.
24th „	Collingwood Street	Do.	Do.
27th „	Warwick Road	Do.	Do.
4th June	Lawson Street	Do.	Do.
5th „	Warwick Road	Do.	Do.
9th „	Do.	Do.	Do.
27th „	Monksclouse Road	Do.	Died, subsequent disinfection
29th „	Margery Street	Do.	Isolated at home and subsequent disinfection
30th July	Thornton Road	Privy	Removed to Isolation Hospital and subsequent disinfection

Table showing localities of cases notified as Diphtheria during the year, with action taken thereon—*continued* : -

Date.	Locality.	Insanitary conditions present.	Action taken.
1914 4th Aug.	Thirlwell Avenue	None	Isolated at home and subsequent disinfection
5th „	Caldcotes	Do.	Do.
13th „	Do.	Do.	Removed to Isolation Hospital and subsequent disinfection
29th „	The Castle	Do.	Do.
9th Sept.	Gloucester Road	Do.	Do.
14th „	The Camp, The Swifts	Do.	Do.
19th „	Caledonian B'dings	Do.	Do.
26th „	Milbourne Street	Do.	Do.
29th „	Delta Court, William Street	Do.	Do.
7th Oct.	Etterby Street	Do.	Isolated at home and subsequent disinfection
17th „	Warwick Road	Do.	Removed to Isolation Hospital and subsequent disinfection
21st „	Norfolk Street	Do.	Isolated at home and subsequent disinfection
4th Nov.	Abbey Street	Do.	Removed to Isolation Hospital and subsequent disinfection
16th „	East Norfolk Street	Do.	Do.
19th „	Nelson Street	Do.	Isolated at home and subsequent disinfection

Table giving name of school attended and number of cases in which a school child was infected with Diphtheria, 1911 to 1914 inclusive.

			1911.	1912.	1913.	1914.
			—	—	—	—
Ashley Street	...	...	1	3	2	2
Bishop Goodwin	...	...	2	0	6	1
Brook Street	...	...	3	0	0	0
Caldewgate	...	...	0	0	0	2
Christ Church	...	...	2	0	0	1
Denton Holme	...	...	0	2	2	1
Fawcett	...	...	1	0	0	1
Higher Grade	...	...	0	0	2	1
Holy Trinity	...	...	2	1	0	1
Lowther Street	...	...	1	2	1	0
Norman Street	...	...	2	1	0	1
Robert Ferguson	...	...	1	1	7	2
St. Bede's	...	...	0	0	2	1
St. Cuthbert's	...	...	1	0	0	0
St. John's	...	...	0	1	0	0
St. Patrick's	...	...	0	0	0	0
St. Stephen's	...	...	2	0	0	0
Botcherby	...	...	0	0	0	2
Stanwix	...	...	0	0	0	2
Upperby	...	...	0	0	0	0
Belle Vue	...	...	0	0	0	0
Private Schools	...	...	1	1	1	1
			—	—	—	—
			19	12	23	19
			—	—	—	—

ANTITOXIN.

3 applications by medical practitioners were made during the year for the free supply of Anti-Diphtheric Serum, 16,000 units being supplied.

SMALLPOX.

The district was free from Smallpox during the year.

PUERPERAL FEVER.

During the year 1 case was notified as suffering from this disease.

The case was carefully investigated and the necessary precautions were taken.

MEASLES.

During the year 2 deaths from this disease were registered.

Calculated upon the estimated population this gives a mortality rate of .03 per 1,000 living at all ages.

The seasonal relationship to death was as follows:—

December	2
----------	-----	-----	-----	-----	-----	---

SCHOOL CLOSURE.

No school was closed during the year.

Table showing the figures supplied by Head Teachers & Attendance Officers of the number of children suffering from several non-notifiable diseases during 1914.

Name of School (All Departments)	Measles.	Chicken Pox.	Whooping Cough.	Mumps.	Total.
Ashley Street ..	90	66	34	45	235
Bishop Goodwin...	...	1	...	...	1
Brook Street ...	...	...	...	...	...
Caldewgate ...	2	13	1	7	23
Christ Church ...	...	...	...	...	...
Denton Holme ...	...	...	...	80	80
Fawcett ...	...	...	...	...	...
Higher Grade ...	...	...	...	...	...
Holy Trinity ...	2	...	...	...	2
Lowther Street ...	...	1	...	8	9
Norman Street ...	...	38	...	...	38
Robert Ferguson...	1	27	...	64	92
St. Bede's ...	...	19	1	10	30
St. Cuthbert's ...	...	...	...	...	...
St. John's ...	...	...	...	...	...
St. Patrick's ...	...	...	...	...	...
St. Stephen's ...	...	...	...	...	...
Belle Vue ...	...	...	...	...	...
Botcherby ...	...	...	...	...	...
Stanwix ...	...	...	...	...	...
Upperby ...	...	...	...	...	...
Totals ...	95	165	36	214	510

Table showing the figures supplied by Head Teachers and Attendance Officers of the number of school children who suffered from several non-notifiable diseases, 1911 to 1914 inclusive.

Year.	Measles.	Chicken Pox.	Whooping Cough.	Mumps.	Total.
1911	437	165	231	963	1796
1912	954	283	238	56	1531
1913	153	43	100	11	307
1914	95	165	36	214	510

Table showing the annual mortality from measles, 1881 to 1914 inclusive.

Year.	No. of Deaths.	Year.	No. of Deaths.		
1881	...	0	1898	...	59
1882	...	36	1899	...	5
1883	...	11	1900	...	13
1884	...	0	1901	...	5
1885	...	22	1902	...	10
1886	...	4	1903	...	3
1887	...	16	1904	...	7
1888	...	3	1905	...	17
1889	...	44	1906	...	1
1890	...	1	1907	...	54
1891	...	22	1908	...	0
1892	...	3	1909	...	11
1893	...	77	1910	...	3
1894	...	20	1911	...	13
1895	...	5	1912	...	39
1896	...	1	1913	...	3
1897	...	1	1914	...	2

ENTERIC FEVER.

(Syn. Typhoid Fever).

During the year 3 cases of Enteric Fever were notified.

In 2 of the cases the clinical features subsequent to notification were characteristic of the disease. The third case, however, was, in my opinion, not at any time characteristic of Enteric Fever, the clinical symptoms and signs being more in keeping with Toxæmia from intestinal putrefaction. A specimen of the blood taken from the patient was negative to Widal's test.

The patient, an adult female, was a member of a very dirty family, the house throughout being extremely dirty and neglected, and it is in such dwellings as this that this kind of case is most likely to occur.

Table showing locality of the cases notified during the year 1914, with action taken.

Date.	Locality.	Insanitary conditions present.	Action taken.	Result.
12th Aug.	Cumberland Infirmary	None	Isolated and nursed at the Infirmary	Recovered
26th Aug.	*Cecil Street	Housedirty	Removed to Isolation Hospital	Recovered
14th Sept.	The Castle	None	Removed to Isolation Hospital	Recovered

* Not Enteric Fever.

Table showing the annual number of cases of Enteric Fever notified from 1890-1914 inclusive.

					Annual No. of Cases.	
Cases of Enteric (Typhoid) Fever notified during 25 years of compulsory notification.	1890	...	...	...	...	21
	1891	...	...	...	...	18
	1892	...	...	...	...	32
	1893	...	...	...	...	20
	1894	...	...	...	...	15
	1895	...	...	...	...	20
	1896	...	...	...	...	13
	1897	...	...	...	...	19
	1898	...	...	...	...	22
	1899	...	...	...	...	19
	1900	...	...	...	...	7
	1901	...	...	...	...	19
	1902	...	...	...	...	16
	1903	...	...	...	...	6
	1904	...	...	...	...	15
	1905	...	...	...	...	7
	1906	...	...	...	...	5
	1907	...	...	...	...	1
	1908	...	...	...	...	2
	1909	...	...	...	...	1
	1910	...	...	...	...	6
	1911	...	...	...	...	3
	1912	...	...	...	...	3
	1913	...	...	...	...	5
	1914	...	...	...	...	2
					Average of 5 years	21.2
					Average of 5 years	18.6
					Average of 5 years	12.6
					Average of 5 years	3.2
					Average of 5 years	3.8

TYPHUS FEVER.

The district was free from Typhus Fever during the year.

POLIOMYELITIS.

During the year 2 cases of acute Poliomyelitis were notified, neither of which terminated fatally.

The notifications were received on the 23rd September and 3rd November respectively.

PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS, 1914.

On February 5th, 1914, the Local Government Board extended the provisions of the Infectious Disease (Notification) Act, 1889, to Ophthalmia Neonatorum.

The Board were advised that general notification of this disease was desirable, as a large proportion of the blindness contracted in childhood is due to neglect of proper precautions against the disease, and in the Board's view Medical Officers of Health should have early information of all cases of the disease.

Article V of the regulations require that every medical practitioner on first becoming aware that a child is suffering from Ophthalmia Neonatorum shall forthwith make and begin a notification of the case in the form prescribed for the purpose of certificates, and shall transmit the notification and statement to the Medical Officer of Health for the district within which the place of residence of the parent or other person (if any) having charge of the child is situate at the date of notification. Provided that a medical practitioner shall not be required to notify a case of Ophthalmia Neonatorum if the case has been notified by a certified midwife, as provided by these regulations.

Articles VI of the regulations provides that every certified midwife who has grounds for supposing that a child upon whom she is in attendance, or whom she is called in to visit in the course of her practice, is suffering from Ophthalmia Neonatorum, shall, unless the case has been already notified by a medical practitioner, forthwith make and sign a notification of the case on the form set out in the schedule to these regulations, and shall transmit the notification to the Medical Officer of Health for the district within which the place of residence of the parents or other person (if any) having charge of the child is situate at the date of notification.

These regulations came into force on the 1st April, 1914, and between that date and the 31st December, 20 cases of the disease (16 males and 4 females) were notified.

In 18 cases the child suffered from the disease in both eyes, the remaining 2 being affected in one eye only.

I personally investigated each case on receipt of the notification, and subsequently kept them under observation, in addition to which all the cases were frequently visited by the Health Visitor.

A careful record of the condition of the eyes of each child at the time of notification, with subsequent notes as to the progress, is made in each instance, and I am of opinion that the supervision thus carried out has been of the utmost value in preventing cases of blindness.

In 19 cases out of the 20, recovery took place without any trace of the disease remaining. In the remaining case, which occurred previous to the regulations coming into force, but which was subsequently notified to me, the sight of both eyes was destroyed. The child had been badly neglected, and shortly afterwards died of gastro-intestinal disease.

ISOLATION HOSPITAL.

Table showing number of cases removed to Hospital—

Diseases.	No. of cases admitted	No. of cases recovered.	No. of cases died.
Scarlet Fever	196	187	9
Diphtheria	31	28	3
Enteric (Typhoid) Fever ...	1	1	...
Erysipelas	1	..	1
Totals	229	216	13

NOTIFICATION FEES.

The total amount paid in fees for notifications of all notifiable diseases during 1914 was £78 8s. 0d.

DIARRHŒA.

During the year 30 deaths from this disease were registered as against 25 in 1913 and 14 in 1912.

Calculated upon the estimated population, the mortality rate shows a figure of .59 per 1,000 living at all ages.

The ages at death were as follows:—

Under 1 year	...	...	25
1—2 years	...	...	2
2—5 years	...	...	1
15—25 years	...	...	1
65—75 years	...	...	1
			—
			30
			—

Seasonal relationship to deaths:—

January	...	...	4	July	...	...	2
February	...	...	2	August	...	...	3
March	...	...	1	September	...	...	12
April	...	...	2	October	...	...	1
May	...	...	—	November	...	...	—
June	...	...	2	December	...	...	1
							—
							30
							—

A warning was again issued on the approach of summer by means of a large poster displayed at or near the entrance to all the lanes and courts in the City, pointing to the prevalence of the disease in hot weather, and the precautions which householders and other should take with regard to the care of food, and especially with regard to the storage, preparation, and care of the food of infants.

See Zymotic Table, page 50, for locality of deaths.

Annual Mortality from Diarrhoea and Enteric (Typhoid) Fever since 1874.

Year.	DEATHS FROM DIARRHOEA.															Deaths from Enteric (Typhoid) Fever.
	Autumn Quarter. No. Registered.	Rate per 1000 of population	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	No.
																Registered.
874	35	1.50	2	2	...	...	1	1	6	20	9	6	...	3	50	23
875	27	1.30	2	...	4	1	2	4	5	12	10	2	...	2	44	24
876	12	1.10	3	1	3	3	1	...	2	5	5	1	6	7	37	10
877	10	.84	2	1	2	1	2	2	2	6	2	1	3	4	28	5
878	26	1.06	1	2	1	1	3	3	9	8	9	1	1	1	40	11
879	...	.34	2	1	1	1	...	2	2	2	...	...	1	...	12	11
880	3	1.20	...	...	5	...	...	...	3	7	21	5	1	...	42	15
881	...	.50	...	2	...	2	...	2	2	2	3	3	...	2	18	7
882	1	.55	...	1	...	...	...	1	5	7	5	1	...	...	20	9
883	8	.45	...	2	...	...	...	...	...	3	5	6	1	...	17	8
884	14	.61	2	...	...	1	1	1	7	3	4	3	1	...	23	7
885	4	.26	1	1	1	...	...	1	2	2	...	...	1	1	10	1
886	8	.60	1	2	...	...	...	2	1	1	6	7	1	2	23	6
887	7	.36	1	...	1	2	...	2	...	5	2	1	...	...	14	17
888	8	.23	1	...	1	1	...	...	...	3	5	1	...	1	13	8
889	6	.27	2	1	...	...	...	...	...	5	1	1	...	1	11	1
890	16	.54	...	...	2	...	1	...	1	7	8	1	1	1	22	2
891	5	.22	1	...	...	...	...	1	1	2	2	2	...	...	9	2
892	2	.10	1	...	...	...	...	...	...	2	2	1	...	...	4	3
893	9	.49	...	2	2	2	...	2	...	2	7	1	2	...	20	5
894	1	.09	...	...	...	...	...	...	...	...	1	1	2	...	4	2
895	3	.24	2	1	...	1	...	...	1	...	2	3	...	...	10	4
896	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
897	4	.21	...	...	2	1	...	...	1	...	3	2	...	...	9	3
898	16	.57	...	...	2	...	1	1	1	4	11	2	1	1	24	2
899	10	.25	...	...	...	...	...	...	...	3	7	1	...	...	11	1
900	7	.53	...	...	...	1	...	4	1	3	3	8	3	...	23	2
901	11	.43	2	3	...	...	...	1	1	5	5	3	...	...	20	5
902	1	.04	...	...	...	...	...	...	1	...	...	...	1	...	2	7
903	1	.06	...	...	1	...	...	1	...	...	1	...	...	...	3	3
904	7	.33	...	...	...	...	...	1	...	4	3	2	3	3	16	3
905	10	.39	3	...	...	1	2	...	...	5	5	2	1	...	19	3
906	7	.26	2	...	1	1	...	...	...	2	5	...	2	...	13	1
907	...	.05	...	...	...	...	1	2	...	...	...	...	...	...	3	...
908	12	.28	...	...	...	1	...	...	2	3	7	...	...	1	14	...
909	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
910	2	.05	...	...	...	...	...	...	...	...	2	...	1	...	3	...
911	45	1.20	2	1	1	3	...	1	1	30	14	2	1	...	56	...
912	2	.30	1	2	...	2	2	1	...	1	1	2	2	...	14	1
913	10	.47	1	1	1	1	2	2	1	1	8	3	...	4	25	...
914	16	.59	4	2	1	2	...	2	2	3	12	1	...	1	30	...



CAPITOL BUILDING, WASHINGTON, D.C.

TUBERCULOUS DISEASES.

Under this heading are included deaths occurring from any of the following conditions :—

Pulmonary Tuberculosis (Consumption of the Lungs), Tuberculous Meningitis (including Acute Hydrocephalus), Tuberculous Peritonitis, Tabes Mesenterica, Generalised Tuberculosis, Tuberculosis of bones, joints, and other organs, Lupus, and Scrofula.

The total number of deaths registered from Tuberculosis of all forms during 1914 was 102 = 1.9 per 1,000 of the estimated population. Of this number 70 = 68.6 per cent. were from Pulmonary Tuberculosis, giving a death-rate of 1.3 per 1,000 of the estimated population at all ages.

During 1913, 96 deaths were registered from all forms of Tuberculosis, of which 71 = 73.9 per cent. were from Pulmonary Tuberculosis, giving a death-rate of 1.3 per 1,000 of the estimated population at all ages.

The above figures show that during 1914 there was an increase of 6 in the number of deaths from all forms of Tuberculosis, and a decrease of 1 in the deaths from Pulmonary Tuberculosis.

Sixteen deaths from Tuberculosis of all forms occurred in institutions within the City, of which number 8 were due to Pulmonary Tuberculosis.

PULMONARY TUBERCULOSIS.

Upon receipt of a notification under the Public Health (Tuberculosis) Regulations, 1913, the information conveyed on the form is transmitted to the Dispensary for the

information of the nurse responsible for certain tuberculosis work in the district from which the case has been notified. As soon as practicable after the receipt of this information the home of the notified person is visited by the nurse, and notes are made by her upon the general condition of the house and the occupation and habits of the patient; an effort is also made to trace the source from which the patient had been infected. If the patient is not confined to bed, an appointment is made for him to attend at the Tuberculosis Dispensary for examination by the Tuberculosis Officer, and in the case of a person too ill to attend at the Dispensary, he is visited by the Tuberculosis Officer at his home. At the time of the visit to the home the nurse also instructs the patient in the value of fresh air, in the arrangement of the patient's bedroom, and the prevention of the spread of infection.

All cases of Tuberculosis notified during the year have been examined by the Tuberculosis Officer as soon as practicable after notification, and the patient's mode of life carefully regulated and supervised. After examination of the person, and the stage of the disease has been ascertained, steps are taken to obtain for the patient the treatment most appropriate to his condition, if such treatment is not being obtained, arrangements being made for those who are likely to benefit by sanatorium treatment to be sent to a suitable institution, while other patients who are unsuitable for sanatorium treatment are treated at home by their own medical attendant, while additional supervision and assistance in the treatment, as far as possible, is given by the Tuberculosis Officer and nurses.

The Dispensary is open on two afternoons in each week, viz., Tuesday and Friday, from 2 to 4, for the examination of persons suffering from Tuberculosis, and

also on Wednesday evenings, from 7 to 9, for the convenience of those suffering from Tuberculosis who are still able to follow their occupations.

From the opening of the Dispensary in October to December 31st, 124 cases of Tuberculosis were under observation. Of this number 114 were persons able to attend at the Dispensary, while 10 patients were visited in their own homes, 163 visits being made to the Dispensary by those attending. As the Institution has been open for such a short period only, I do not propose in this report to furnish a detailed analysis of the cases treated and the results of the treatment.

The treatment and supervision of patients at the Dispensary, and work ancillary thereto, has consisted of advice as to personal and general hygiene and mode of life, the value of fresh air, good food and regular hours, and in suitable cases the administration of Spengler's Immune Korper (I.K.), together with appropriate literature bearing upon vital matters in relation to the disease. Medicines or prescriptions for medicines are not supplied to the patients at the Dispensary, any such matter of treatment being left entirely in the hands of the person's own medical practitioner. Advice and assistance are also given to the doctors in charge of the cases, if requisite, and the life of the sufferer is supervised by the periodical visits which are paid by the nurse to the house. During the part of the year under review, 260 visits were paid to homes of tuberculous persons by the nurses for this purpose.

The following up of persons who have been in contact with a consumptive person is an extremely important factor in the work, as in this way an affected person may be dis-

covered in the early stage of the disease, when treatment is more likely to produce permanent benefit by completely arresting the disease. It has, unfortunately, been impossible to carry out this part of the work completely, owing to the large amount of time taken up by work in connection with the medical inspection of school children and the treatment of defective cases at the School Clinic, but wherever possible contacts have been examined, especially those who showed any sign of ill-health, or were suspected to be suffering from the disease in an incipient form

On April 12th, when the City Council became responsible for the treatment of cases of tuberculosis in the City, 10 people were receiving treatment in sanatoria, of whom 5 were at Blencathra Sanatorium and 5 at the Philipson Children's Sanatorium, Northumberland. During the remainder of the year 12 additional children and 8 additional adults have been sent to sanatoria, 12 of whom were sent to the Philipson Children's Sanatorium, 5 to Blencathra, and 3 to the Westmorland Sanatorium at Meathop, making a total of 30 patients who received sanatorium treatment during the year. Eight of the total number of cases remained under treatment on December 31st, namely, 3 at Stannington, 3 at Meathop, and 2 at Blencathra. The average duration of treatment of the 22 patients whose treatment in the various sanatoria was completed at the end of the year was 103.9 days, the condition of the patients on discharge from the sanatoria being as follows :—

Disease arrested	...	...	13
Much improved	...	...	5
Improved	...	...	4
			—
			22
			—

On December 31st there were 10 patients waiting for admission to sanatoria, 4 of whom were children and 6 adults.

The work in connection with the treatment of tuberculosis will be considerably facilitated when the extensions which are being carried out at the Blencathra Sanatorium are completed, the Corporation will then be able to avail themselves of a first call upon 20 beds, which will mean that it will be possible to get patients away to the sanatorium without the prolonged waiting which has hitherto obtained.

This accommodation at Blencathra, when complete, does not, however, provide for those unfortunate sufferers in an advanced stage of the disease, but for these cases an agreement has been entered into with the Cumberland County Council for the provision of 15 beds in a hospital, which it is contemplated will be soon established. Beds will then be available for advanced cases of tuberculosis in persons who live under insanitary conditions, and by whom the disease is principally spread.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the period from the 4th January, 1914, to the 2nd January, 1915, in the County Borough of Carlisle.

		NOTIFICATIONS ON FORM A.											
		Number of Primary Notifications.											
Age Periods.		0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 & upwards.	Total Prim-Total Notifications on Form A.
Pulmonary Males	...	2	4	15	14	13	9	16	8	11	6	1	99
" Females	...	1	...	6	9	15	15	19	8	3	4	2	82
Non-pulmonary Males	...	3	8	2	10	7	1	2	...	...	...	..	33
" Females	...	3	3	..	3	6	2	3	1	1	...	1	23
101													
83													
35													
23													

		NOTIFICATIONS ON FORM B.				Total Notifications on Form B.	
Age Periods.		Under 5.	5-10	10-15	Total Primary Notifications.		
Pulmonary Males	6	15	21	21	
" Females	16	13	29	29	
Non-pulmonary Males	
" Females	

		NOTIFICATIONS ON FORM C.	
		Poor Law Institutions.	Sanatoria.
Pulmonary Males	...	15	19
" Females	...	2	10
Non-pulmonary Males	...	3	...
" Females	...	...	...

Ages at death of cases of Pulmonary Tuberculosis during 1913 and 1914.

Year.	Under 1 Year.	1-2	2-5	5-15	15-25	25-35	35-45	45-55	55-65	65-75	All Ages.
1913	1	2	1	9	22	15	8	4	7	2	71
1914	1	1	1	3	14	17	13	13	6	1	70

The distribution of the deaths during 1914 was as follows :—

St. Mary's Sub-Registration District	...	...	40
St. Cuthbert's Sub-Registration District	...	...	28
Stanwix Sub-Registration District	...	...	1
Dalston Sub-Registration District	...	...	1
			—
			70
			—

Two other diseases of the chest, viz., Pneumonia and Bronchitis, were responsible for 91 deaths during 1914.

Disease.	St. Mary's	St. Cuthbert's.	Stanwix.	Total.
Broncho-Pneumonia	13	4	...	17
Pneumonia (all other forms)	23	12	2	37
Bronchitis	17	19	1	37
Totals	53	35	3	91

Deaths from Tuberculosis and Respiratory
Disease from 1901 to 1914 inclusive.

Year.	Number of Deaths from Phthisis.	Number of Deaths from Tuberculosis other than Phthisis.	Number of Deaths from other Respiratory Diseases
1901	71	35	144
1902	57	42	118
1903	73	23	92
1904	70	36	167
1905	62	32	130
1906	67	30	122
1907	54	15	137
1908	56	34	112
1909	64	28	108
1910	52	30	91
1911	75	19	98
1912	65	11	116
1913	71	25	91
1914	70	32	96



CARROLL TUBBSON'S DISSEMINATION OF CONSTITUTIONAL ROOM

Midwives Act, 1902.

(SUPERVISION OF MIDWIVES).

On and after the 1st April the supervision of midwives under the above Act, which had previously been carried out by the County Council, became the duty of the Corporation. The work of supervision comprises a considerable amount of administrative and other matters, which are carried out by the Medical Officer of Health.

The duties of the Corporation as the Supervising Authority, in addition to the registration of midwives, comprise :—

I. A general supervision over all midwives practising within their area, in accordance with the rules drawn up by the Central Midwives Board under Section 3 of the Act and approved by the Privy Council.

II. Investigation into the charges of malpractice, negligence, or misconduct on the part of a midwife.

III. Suspending a midwife from practice, if necessary, in accordance with the Board's rules.

During the year 1914 16 certified midwives were registered for the practice of midwifery in the City.

At the end of each quarter of the year (and all other times when necessary) the midwives have been visited at their homes, the necessary inspections of their books, bags, appliances, &c., being made.

No case came to my notice during the year of any unregistered or uncertified woman carrying on the practice of midwifery.

During the year 623 confinements were attended by certified midwives. In 36 cases complications either during or after labour were recorded, while medical assistance was obtained in 29 cases.

The following notices upon the prescribed forms were sent in by midwives:—

I.	Notice relating to sending for medical help	29
II.	Notice of having laid out a dead body ...	2
III.	Notification of death	6
		—
		37
		—

INQUESTS.

During the year the City Coroner held 53 inquests, as compared with 50 during 1913.

Of this number 45 were held upon the bodies of those who had been resident within the City, and 8 upon the bodies of persons who had resided in other districts, but who died within the City.

4 of the inquests were held upon the bodies of children under 5 years, 3 of these being children under 1 year.

The finding of the Jury and the ages in these 4 cases respectively were:—

Cause.					Age.
Suffocated in bed	...	...	...	...	11 weeks
Do. do.	..	...	...	...	7 weeks
Do. do.	...	...	...	...	3 months
Accidental burning	...	...	...	...	1½ years

MORTUARY.

During 1914, 13 bodies were removed to the Public Mortuary, West Walls, and a post-mortem examination was performed in each instance.

UNCERTIFIED DEATHS.

During the year 25 deaths were registered in which no certificate was given by a medical man, and in which no inquest was held.

During 1913, 21 such deaths were registered.

The 25 deaths in question were registered
as follows.

No.	Sex.	Age.	Cause of Death as Registered.
1	Female	*3 months	Broncho-Pneumonia
2	Male	51 years	Dropsy
3	Male	82 years	Heart Failure
4	Male	71 years	Heart Disease
5	Male	67 years	Heart Failure
6	Female	69 years	Heart Failure
7	Female	*4 months	Rickets
8	Male	*1 day	Inanition
9	Male	*5 hours	Inanition
10	Male	4 years	Injury to Spine
11	Male	83 years	Heart Disease
12	Male	63 years	Heart Failure
13	Female	64 years	Heart Failure
14	Female	79 years	Fractured Arm
15	Male	47 years	Bright's Disease
16	Female	72 years	Heart Failure
17	Female	*3 months	Diarrhœa
18	Female	*8 months	Convulsions
19	Female	*2 months	Convulsions
20	Male	56 years	Alcoholic Multiple Neuritis
21	Male	71 years	Heart Failure
22	Male	*5 months	Convulsions
23	Male	*1 day	Premature Birth
24	Female	83 years	Heart Failure
25	Female	58 years	Heart Disease

*It will be observed that nine of these twenty-five uncertified deaths were infants under one year of age.

CANCER.

The following figures include all registered deaths from causes within the general term Cancer. The number of deaths registered during 1914 was 68, as against 63 in the year 1913.

Calculating the 68 cases upon the estimated population, a mortality rate of 1.2 per 1,000 at all ages is obtained.

Table of Deaths, 1909 to 1914.

Age.	Numbers.					
	1909	1910	1911	1912	1913	1914
1 to 5 years ...	...	...	1	...	1	...
5 to 15 years ...	...	...	2	...	1	...
15 to 25 years ...	...	1	2	3	...	...
25 to 35 years ...	2	...	5	2	1	2
35 to 45 years ...	6	7	5	6	5	10
45 to 55 years .	12	11	6	18	11	10
55 to 65 years ...	15	11	11	18	25	20
65 to 75 years ...	17	11	7	10	14	16
75 and upwards ...	6	6	6	5	5	10
Totals ...	58	47	45	62	63	68

MILK SUPPLIES.

(DAIRIES, COWSHEDS, MILKSHOPS, &c.)

The milk supply to the inhabitants of the City is derived partly from cows belonging to cow-keepers within the City and partly from those belonging to farmers and cow-keepers in the County area.

There are 54 cow byres in existence within the City, accommodating at the present time 420 milk cows.

The byres and dairy buildings and other places from which milk is sold within the City are regularly inspected by members of the staff of the Health Department, and the milk cows are subject to the constant supervision and the frequent and regular examination of the City Veterinary Surgeon.

During the past year, 33 samples of milk were purchased and submitted to the City Analyst for the purpose of chemical analysis, which also included tests for determining the presence of preservatives. In addition, 22 samples of milk were purchased for the purpose of bacteriological observation, from the carts of persons vending milk within the City whose dairies are situate in the County area. These samples were submitted to Professor Delépine for the purpose of inoculation experiments upon guinea pigs, in order to ascertain the presence or absence of the tubercle bacillus in the milk sample. In connection with the 22 samples of milk thus experimented with, two of the samples contained the tubercle bacillus, concerning which I made the following report to the Health Committee :—

“I have to report in connection with certain samples of milk taken from carts belonging to farms outside the

City on 10th December, for the purpose of ascertaining the presence or absence of tubercle bacilli in the milk, the report of Professor Delépine showed that two of the samples from farms (which I propose to call Nos. 30 and 33), after inoculation experiments, demonstrated the presence of tubercle bacilli.

“On receipt of Professor Delépine’s report I visited the two farms, accompanied by Mr. Robinson, the City Veterinary Inspector, and interviewed the respective farmers upon the matter, both of whom offered every facility for the examination of the whole of their milk cows.

“In the case of farm No. 30, 45 cows were in milk at that time, whilst in the case of farm No. 33, 5 cows were in milk.

“With regard to farm No. 30, the suspicion of the Veterinary Inspector fell upon five of the cows, each of which exhibited signs of induration of the posterior quarter or quarters of the udder; a sample of milk was therefore taken from the affected quarter of the udder in each instance. At the same time the owner of the cows gave me an undertaking that the milk from two of the more suspicious animals would not be sold.

“In the case of farm No. 33 the suspicion of the Veterinary Inspector fell upon an animal which exhibited some induration of one of the posterior quarters of the udder, from which a sample was taken.

“The six samples thus obtained were sent to Professor Delépine who reported that tubercle bacilli were found in one of the samples from farm No. 30.

“It was thought advisable that further samples should be taken from certain of the cattle at both farms, for which

purpose the two farms were again visited, when four further samples were taken from cows at farm No. 30, and two samples from cows at farm No. 33. Professor Delépine certified that he failed to find tubercle bacilli in any of the six specimens.

“On my first visit I found at farm No. 30 a cow which had been isolated by the owner on account of the animal having lost the use of its hind legs. I advised him to send the animal to the Public Slaughter-houses, when after slaughter it was found to be suffering from advanced tuberculosis of the spine and other parts of the body.

“On my third visit to the farm one of the two cows isolated, which was shown to be giving tuberculous milk, had been dried off; and as the milk of the second animal was found to be free from tubercle bacilli, this animal was put back into a small byre.

“With regard to farm No. 33 a somewhat peculiar incident was observed, for whilst tubercle bacilli were found in the samples of milk first taken from the cart, no tubercle bacilli could be found in the samples taken from the udders of the suspected cows at the farm, in which one would have expected the bacillus would have been found. The explanation of this circumstance is probably due to the fact that during the time the samples were taken from the cart, in December, the owner of the cows at farm No. 33 was buying milk from various milk carts coming from the same district, in order to help him out with his round. It is therefore not unreasonable to suppose that on the particular occasion on which the samples were taken he might have been supplied with milk from the cart coming from farm No. 30.”

PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

Analytical Report for the year ended 31st December, 1914:—

1. Milk ; and cream not sold as preserved cream.

—	(a) Number of samples examined for the presence of a preservative.	(b) Number in which a preservative was reported to be present.
Milk	33	Nil
Cream	7	2

Nature of preservative in each case in column (b) and action taken under the Regulations in regard to it.

2. Cream sold as preserved cream.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct.

(i) Correct statements made	5
(ii) Statements incorrect	2
Total	7

(b) Determinations made of milk fat in cream sold as preserved cream.

(i) Above 35 per cent.	6
(ii) Below 35 per cent.	1
Total	7

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V (1) and the proviso in Article V (2) of the Regulations have not been observed... .. 2

(d) Particulars of each case in which the Regulations have not been complied with, and action taken :—

1 sample with less than 35% milk fat contained boric acid.

1 sample containing boric acid bore no label to that effect.

3. Thickening substances. Any evidence of their addition to cream or to preserved cream. Action taken where found Not sought for

4. Other observations, if any :—

As all the above samples of cream were taken informally, no action was taken; but vendors were cautioned.

REPORT OF VETERINARY INSPECTOR.

During the first four months of the year 172 newly purchased cows were examined in the several byres of the City. All the animals were subjected to the Tuberculin Test, and 79 gave a characteristic re-action. These animals were certified as suffering from tuberculosis, and were returned to the sellers.

Soon after the commencement of the war the Board of Agriculture and Fisheries suspended all the Orders relating to the Diseases of Animals Act, including the Tuberculosis Order of 1914.

Previous to the suspension of the Tuberculosis Order of 1913, two notifications were received under the provisions of the Order. Both animals were slaughtered and dealt with in the manner provided by the Order.

All the bovine animals exposed for sale at the Sands Cattle Market and also at the Auction Marts were examined by me, a total of 54,924 such examinations being made, and the following disease was discovered :—

Chronic disease of the udder ... 2

Statutory notices were served upon the owners, the County Veterinary Inspector being at the same time notified as to the destination of the animals.

The Auction Marts were regularly visited each Monday, and 13,197 pigs were examined.

At the request of the Medical Officer of Health or Chief Sanitary Inspector I examined 21 carcasses of beef and one carcass of a pig at the Public Abattoir, two carcasses of beef deposited in lock-up shops, and two fore-

quarters and 11 smaller pieces of beef in a shamble in the Public Market, which, with the exception of one carcase of beef, I certified to be unfit for human food.

On the outbreak of Foot and Mouth Disease in Ireland, detention notices were served upon all owners of Irish cattle within the City. The number of cattle detained was 283. These animals were examined every second or third day until the expiration of the notices. On the re-opening of the Sands Market on 14th March, a heifer presented symptoms of the disease in the tongue and lips which was accompanied by a high temperature. Mr. J. Bell, M.R.C.V.S., saw the animal in consultation with me, and whilst we were both satisfied that it was not Foot and Mouth Disease we thought it a case for further investigation by the Board of Agriculture. After a consultation with the Town Clerk upon the matter, he (the Town Clerk) telegraphed to the Board, who sent an Inspector down from London, and upon investigation the Inspector certified that the animal was not suffering from Foot and Mouth Disease.

Examinations of milk cows in the byres of the City made during the year in order to ascertain the presence or absence of diseases likely to affect the milk supply, resulted in the discovery of the following conditions :—

Milk Fever	...	...	3
Congestion of Lungs	...	...	1
Septicæmia	...	...	8
Tubercular Pneumonia	...	...	1
			—
			13
			—

The animal suffering from tubercular pneumonia was slaughtered. The two animals suffering from septicæmia died, whilst the milk of the other 10 animals was destroyed until convalescence was established.

The Corporation stud, consisting of 21 horses, was under constant observation. I regret to say that during the spring months a serious outbreak of influenza occurred amongst the horses, in consequence of which two aged animals died of septic pneumonia following upon the influenza.

Upon the purchase by the Corporation of the motor fire engine the two horses formerly used for fire brigade work were not required, and were sold by tender for £75.

During the month of October the War Office commandeered eight of the Corporation horses, for which the sum of £468 10s. 0d. was obtained. I purchased other horses to fill the places of those sold, for which the sum of £446 5s. 0d. was paid.

COVERED MARKETS.

In each of my Annual Reports I have spoken of the nuisance from the presence of dogs in the Covered Markets, and the danger to the health of the public from the contamination of food exposed for sale.

Notices are posted up at several points inside the Market warning the public against bringing dogs into the building, but in spite of these notices there are to be seen every day, chiefly belonging to occupiers of shops and stalls, dogs which spend their whole daytime in the Markets. I hope the committee concerned will take some action in the matter, for which purpose there is a provision in the Bye-laws relating to the Covered Markets.

SEWAGE WORKS.

During the past year I have paid several surprise visits to the Sewage Works, and am satisfied that the work is carried out by the men employed there in a careful manner.

AMBULANCE.

The Horse Ambulance provided by the Corporation is under the superintendence of the Head Constable, and is housed at the Chief Fire Station, Spring Gardens Lane. The Ambulance, which is in keeping with modern requirements, is available for use by the public in case of accident, injury by fire, &c., or its use may be obtained for the removal of a sick or convalescent person other than a case of infectious disease (for which a special ambulance is provided).

During the year its use was requisitioned on 70 occasions.

HOUSING OF THE WORKING CLASSES.

HOUSING OF THE WORKING CLASSES ACT, 1890.

HOUSING, TOWN PLANNING, &c., ACT, 1909.

As a result of the procedure subsequent to the inspection of houses in accordance with the regulations made under the Housing, Town Planning &c., Act, 1909, a scarcity of dwelling houses suitable for the working classes has become apparent.

During the past five years a large number of insanitary dwelling houses have been made habitable by remodelling or the conversion of two or more small tenements into satisfactory houses, but unfortunately in a large number of instances, owing to the dilapidated condition of walls and other undesirable defects, closure followed by demolition has been found necessary, and the present shortage of houses would appear to be the result of this procedure either alone or in conjunction with the fact that only a comparatively small number of dwelling houses have been erected by private enterprise during the same period.

Having regard to the increasing demand for houses in the City, the Corporation have carefully considered the matter in its various aspects, and have decided to proceed with a scheme for the erection of dwelling houses, plans, estimates, &c., have been prepared by the City Surveyor in connection therewith, and it has been thought advisable in the first instance to proceed with the construction of 30 houses, some of which it is proposed shall be erected in the neighbourhood of Caldewgate and others on land owned by the Corporation at Boustead's Grassing.

During the past year 1076 dwelling houses have been inspected under and for the purposes of the above Acts.

Forty-five houses (comprising 52 dwellings) were dealt with under the provisions of Section 17 (2) of the Housing, Town Planning, &c., Act, 1909, particulars of which are set out in the following pages.

In the case of 307 houses no action has yet been taken. This group occupies a circumscribed area in the west central portion of the City, and many of the houses, courts, &c., in the area are dangerous to the health of the inhabitants by reason of their dilapidated and damp condition, of the want of light, ventilation, and other sanitary defects, which, in my opinion, cannot be effectually remedied otherwise than by re-arrangement and reconstruction of a considerable number of the streets and houses.

The remaining 724 houses were found to be satisfactory, except for certain minor defects which were discovered, and which were capable of being dealt with, either under the provisions of Section 15 of the Housing, Town Planning, &c., Act, 1909, or the Public Health Acts, particulars of which are set out in tables later.

Housing, Town Planning, &c., Act, 1909.

Number and Situation.	Date represented to Committee.	Date of Closing Order served under Housing, Town Planning, &c., Act, 1909.	Date of Demolition Order served under Housing, Town Planning, &c., Act, 1909.	Remarks.
Broadguards	1st March, 1912	12th April, 1912	...	House made habitable
10, & 12 Drovers' Lane, 17 and 18 Slack's Court, Drovers' Lane	18th Oct., 1912	11th Dec., 1912	9th Sept., 1913	Houses demolished
3, 4, 5, 6, 7, 8, 9, and 10 Young's Lane, Rickergate	28th Feb., 1913	8th April, 1913	...	Houses made habitable
3 & 15 Rickergate, and 1 and 2 Swifts Row, Rickergate	28th Feb., 1913	8th April, 1913	28th Oct., 1913	Houses in process of demolition
houses, Thompson's Court, Fisher Street	28th Feb., 1913	8th April, 1913	28th Oct., 1913	Houses demolished
1 & 13 Mary Street, 7 houses in Watt's Court, Mary Street	28th Feb., 1913	14th Oct., 1913	16th Sept., 1914	Houses demolished
5 & 17 Mary Street, 12 houses in Pattinson's Court, Mary Street	26th Sept., 1913	14th Oct., 1913	16th Sept., 1914	Houses demolished
2, 14, 16, 18, 20, 22, 24, 26, 28, 30, and 32 Mary Street	26th Sept., 1913	14th Oct., 1913	...	Houses made habitable
7, 39, & 41 Rickergate, and 1, 2, and 3 Drovers' Lane	24th Oct., 1913	28th Oct., 1913	...	Houses made habitable
1 & 33 Rickergate.	21st Nov., 1913	9th Dec., 1913	...	Houses made habitable
2, 3, 4, 5, 6, 7, and 9 Barley Stack Lane	21st Nov., 1913	9th Dec., 1913	10th June, 1914	In process of demolition

Housing, Town Planning, &c., Act, 1909—*continued.*

Number and Situation.	Date represented to Committee.	Date of Closing Order served under Housing, Town Planning, &c., Act, 1909.	Date of Demolition Order served under Housing, Town Planning, &c., Act, 1909.	Remarks.
9, & 11 Peascod's Lane	21st Nov., 1913	9th Dec., 1913	10th June, 1914	Houses demolished
2, 3, 4, 5, 6, 7, 8, and 9 Hutchinson's Lane, Stanwix	27th Feb., 1914	16th March, 1914	...	Houses made habitable
Kell's Place, Stanwix	27th Feb., 1914	16th March, 1914	28th Oct., 1914	In process of demolition
14, & 15 Brewery Row	27th March, 1914	17th April, 1914	28th Oct., 1914	Houses made habitable
2 Mc.Cutcheon's Court, Milbourne Street	27th March, 1914	17th April, 1914	28th Oct., 1914	Houses made habitable
1, 3, 5 Chapel Street	19th June, 1914	15th July, 1914	...	Nothing done
13, 15 Chapel Street	19th June, 1914	15th July, 1914	...	Houses made habitable
14, 16, 18, 22, 26, & 28 Chapel Street	19th June, 1914	15th July, 1914	...	Nothing done
26, 28, 30, 32, and 34 Jane Street	19th June, 1914	15th July, 1914	...	Houses made habitable
Houses in Donald's Court, Willow Holme	19th June, 1914	15th July, 1914	...	Nothing done. Part of proposed site for new housing scheme
Houses Willow Holme	19th June, 1914	15th July, 1914		
Houses on Stanwix Bank	23rd Oct., 1914	28th Oct., 1914	...	Houses made habitable

Table showing number of dwelling houses erected in the City from 1891 to 1914 inclusive.

No. of Houses			No. of Houses		
Year.		erected.	Year.		erected.
1891	...	149	1903	...	170
1892	...	81	1904	...	269
1893	...	148	1905	...	181
1894	...	184	1906	...	183
1895	...	176	1907	...	42
1896	...	198	1908	...	27
1897	...	217	1909	...	7
1898	...	208	1910	...	23
1899	...	226	1911	...	11
1900	...	262	1912	...	11
1901	...	181	1913	...	18
1902	...	178	1914	...	38

WATER SUPPLY.

During the year samples of water were regularly taken from a domestic tap and submitted to chemical and bacteriological examination, the quality of the water, as in previous years, being uniformly good.

Chemical and bacteriological results of quarterly samples are given in the following pages, together with the results of a special examination as to the action of the water upon lead.

Total monthly distribution of Water from
Cumwhinton covered reservoir during 1914--

Month.	Number of Gallons.	No. of Gallons per head, per day.
January ...	55,370,000	31.89
February ...	48,660,000	31.03
March ...	54,500,000	31.39
April ...	55,580,000	33.08
May ...	56,370,000	31.90
June ...	60,560,000	35.41
July ...	63,470,000	35.92
August ..	63,960,000	36.19
September	59,600,000	34.85
October ...	58,430,000	33.07
November	54,840,000	32.07
December	59,070,000	33.33

Total annual distribution of Water from
Cumwhinton covered reservoir during the
years 1911—1914.

Year.	Number of Gallons.	No. of Gallons per head, per day.
1911	645,490,000	31.48
1912	645,080,000	31.47
1913	665,410,000	32.53
1914	690,410,000	33.34

Reports on Samples of Water from Domestic Tap.

CHEMICAL ANALYSIS BY DR. HELLON, WHITEHAVEN.

Results shown in grains per gallon.

1914.

CHEMICAL.	APRIL.	JULY.	OCT.	DEC.
Total Solid Matter in solution dried at 212° F ...	7.280	7.840	7.000	7.280
Chlorine existing as Chlorides	.630	.595	.560	.595
Ammonia ...	traces	traces	traces	traces
Albuminoid Ammonia ...	.005	.002	.002	.003
Nitrogen existing as Nitrates...	traces	traces	traces	traces
Oxygen absorbed in 15 minutes at 80° F ...	.045	.022	.025	.038
Oxygen absorbed in 4 hours at 80° F ...	.078	.045	.044	.073
Lead and other Poisonous Metals	None	None	None	None
Hardness before boiling ...	6 $\frac{1}{4}$ °	7°	6 $\frac{1}{4}$ °	6°
Hardness after boiling ...	1 $\frac{1}{4}$ °	1°	1 $\frac{1}{4}$ °	1°
Appearance in two-foot tube ...	Clear greenish- yellow	Clear yellowish- green	Clear yellowish- green	Clear yellowish- green
Smell when heated to 100° F...	None	None	None	None
Microscopical Examination ...	Vegetable debris	Slight deposit of Vegetable debris	Vegetable debris	Slight deposit of Vegetable debris

A determination of the plumbo-solvent action of the water was made according to the method of the Local Government Board in all samples taken during the year, with the following results:—

Lead dissolved at 11° C—

	1st	2nd	3rd	4th	5th	Average.
APRIL	50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	
	.02	.03	.02	.02	.02	.02

Lead dissolved at 17° C—

	1st	2nd	3rd	4th	5th	Average.
JULY	50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	
	.02	.03	.04	.04	.03	.03

Lead dissolved at 11° C—

	1st	2nd	3rd	4th	5th	Average.
OCT.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	
	.03	.03	.03	.03	.03	.03

Lead dissolved at 8.5° C—

	1st	2nd	3rd	4th	5th	Average.
DEC.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	
	.03	.04	.03	.03	.03	.03

BACTERIOLOGICAL EXAMINATION BY PROF. DELÉPINE, MANCHESTER.

QUANTITATIVE ANALYSIS		1914.							
A Aerobic micro-organisms growing for 3 days in nutrient gelatine at 26° C to 21° C.		Number of colonies in one grammme of water.				No. of kinds clearly recognisable.			
		APRIL.	JULY.	OCT.	DEC.	APR.	JULY.	OCT.	DEC.
Non-Liquefying Bacteria ...		4	6	1	5	1	2	1	2
Liquefying Bacteria ...		...	0	3	2	...	0	3	2
Other Micro-Organisms ...		...	1	...	...	...	1	..	...
B Anaerobic Micro-Organisms ...		...	...	...	...	...	...	...	...
QUALITATIVE ANALYSIS.		1914.							
		APRIL.	JULY.	OCT.	DEC.				
A Bacteria associated with sewage or faecal pollution ...		B. Coli communis not found in 100 C. C.	B. Coli communis not found in 100 C. C.	B. Coli communis not found in 100 C. C.	B. Coli communis not found in 15 C. C. Found in 100 C. C.				
B Bacteria associated with disease		Not found	Not found	Not found	Not found				

PUBLIC SLAUGHTER-HOUSES.

The following Table gives particulars of carcasses killed and examined.

Animal	Total number of animals slaughtered and examined	Number of carcasses specially examined for disease	Number of cases in which the whole carcass was pronounced unfit for food	Number of cases in which portions of a carcass were pronounced unfit for food	Number of condemned carcasses affected with Tuberculosis
Oxen ...	3668	76	66	10	46
Sheep ...	15320	7	6	1	0
Calves ...	616	2	2	0	0
Pigs ...	3687	4	4	0	0
Totals ...	23291	89	78	11	46

Each carcass of an animal killed at the public slaughter-houses is seen and carefully examined by the resident Superintendent. In the case of a carcass which, in his opinion, is unfit for food, and in all doubtful cases, he at once communicates with the Medical Officer of Health or the Chief Sanitary Inspector, who makes a further examination of the carcass, and decides upon the fitness or otherwise of the carcass for human food.

During the year, 89 diseased carcasses were thus specially referred by the Superintendent for further examination, and in 78 instances the whole carcass was certified as unfit for food, while in 11 instances part or parts of the carcass only were considered to be unfit for food.

A glance at the above table shows that out of a total of 76 diseased bovine animals examined, in 46 instances the whole carcase was affected with tuberculosis, which means that the whole carcase was so badly affected with disease that it was destroyed.

All carcases and parts of carcases certified as unfit for food are destroyed by burning at the Corporation destructor.

PUBLIC BATHS.

NUMBER OF BATHERS DURING 1914.

The total number of bathers was 68,625, as compared with 63,701 in 1913, and 58,647 in 1912.

SWIMMING BATHS.				1st Class.	2nd Class.	Total.
Adults (both sexes)	...	...	...	4,583	14,621	19,204
Elementary School Children (Free)	...	...	...	...	14,742	14,742
Boys' Brigade, &c. (swimmers charged 1d. each)	...	...	...	...	4,608	4,608
Club and Contract Bathers (1st and 2nd Class) ...	...	...	...	...	...	6,009
Recruits, Border Regiment (free)	...	...	...	...	5,384	5,384
PRIVATE BATHS.						
Adults (both sexes)	...	...	...	4,681	11,753	16,434
Vapour	...	...	...	...	...	74
Salt	...	...	...	8	5	13
TURKISH BATHS.						
Males	...	...	...	405	1,238	1,643
Females	..	...	...	39	475	514
Totals	...	...	...	...	...	68,625

METEOROLOGICAL STATISTICS, 1914.

OBSERVATIONS TAKEN AT THE CEMETERY BY J. T. CHARLTON, ESQ.

Like 1913, last year was distinguished by a deficiency in rainfall in comparison with the average for a number of years, and the deficiency would have been more pronounced but for the very wet weather in November and December. The average in this part of the country is $30\frac{1}{2}$ inches, and the following figures indicate that in recent years we have been passing through a cycle of drier weather than usual:—

1914, 28.31ins. falling on 201 days.

1913, 27.17ins. falling on 194 days.

1912, 30.01ins. falling on 217 days.

1911, 30.20ins. falling on 181 days.

November was the wettest month last year with $4\frac{1}{2}$ inches, and June the driest with a little over 1 inch, July being a very wet month in comparison with the corresponding months of previous years, as shown by the following table —

RAINFALL.

	1914.			1913.			1912.	
	Inches.	Rainy days.		Inches.	Rainy days.		Inches.	Rainy days.
January ...	2.64	17	...	2.17	20	...	1.45	16
February ...	2.59	22	...	1.27	15	...	1.39	19
March ...	2.67	26	...	3.37	21	...	3.81	26
April ...	1.36	14	...	2.77	15	...	0.42	8
May ...	1.73	17	...	1.78	16	...	1.81	17
June ...	1.06	10	...	2.40	17	...	4.13	24
July ...	3.04	14	...	1.12	11	...	1.83	14
August ...	2.73	13	...	2.17	10	...	4.47	24
September ...	1.28	11	...	2.11	8	...	2.22	10
October ...	1.11	14	...	2.51	16	...	2.1	18
November ...	4.52	20	...	3.4	29	...	2.65	18
December ...	3.58	23	...	2.46	16	...	3.73	23
Total ...	28.31	201		27.17	194		30.01	217

The barometrical readings somewhat singularly give the highest atmospheric pressure in the wet month of November. The maximum reading for the year was 30.504 on November 18th, as compared with

30.506 on December 18th, 1913, and 30.610 on February 1st, 1911. The lowest reading was 28.252 on February 22nd, as compared with 28.368 on March 19th, 1913, these being the lowest readings in recent years. The following are the monthly records :—

BAROMETRICAL READINGS.

		Highest.		Lowest.		Mean.	Monthly.
		Inches.		Inches.		Inches.	Range.
January	...	30.392 on 1st	...	29.390 on 5th	...	29.690	1.002
February	...	29.885 on 27th	...	28.252 on 22nd	...	29.361	1.634
March	...	29.826 on 28th	...	28.858 on 20th	...	29.337	0.968
April	...	30.456 on 26th	...	28.930 on 27th	...	29.792	1.526
May	...	30.286 on 17th	...	29.132 on 8th	...	29.857	1.154
June	...	30.198 on 25th	...	29.582 on 7th	...	29.929	0.616
July	...	30.076 on 9th	...	29.322 on 25th	...	29.552	0.754
August	...	30.216 on 12th	...	29.355 on 2nd	...	29.793	0.860
September	...	30.280 on 29th	...	29.082 on 14th	...	29.886	1.198
October	...	30.268 on 4th	...	29.374 on 28th	...	29.913	0.894
November	...	30.504 on 18th	...	29.014 on 30th	...	29.660	1.490
December	...	30.116 on 24th	...	28.688 on 14th	...	29.319	1.428

As far as temperature goes, last year showed a mean temperature the same as in the warm summers of 1911 and 1913. In arriving at the mean, the readings of the exposed and shaded thermometers are combined with the following results :—1914, 57 degrees ; 1913, 57 degrees ; 1912, 55.4 degrees ; 1911, 57 degrees ; 1910, 55.1 degrees.

THERMOMETER READINGS.

		Solar		Terrestrial		Mean.
		Radiation.		Minimum.		deg.
		deg.		deg.		
January	...	75 on 26th & 31st		16 on 1st	...	42.9
February	...	104 on 28th	...	23 on 25th	...	42.6
March	...	115 on 31st	...	23 on 10th & 11th	...	45
April	...	133 on 20th	...	26 on 15th	...	71
May	...	123 on 15th	...	27 on 25th	...	96
June	...	129 on 4th & 30th	...	35 on 8th	...	81.3
July	...	131 on 21st	...	36 on 4th	...	82.1
August	...	132 on 13th & 14th	...	39 on 16th	...	82.3
September	...	127 on 5th	...	29 on 21st & 29th	...	78.0
October	...	112 on 3rd	...	27 on 19th	...	65.0
November	...	90 on 10th	...	19 on 18th	...	50.3
December	...	77 on 31st	...	18 on 23rd	...	43.6

			Shade Maximum. deg.		Shade Maximum. deg.		Monthly Mean. deg.
January	...	...	56 on 25th & 31st		19 on 1st	...	38.2
February	...	...	64 on 15th	...	23 on 25th	...	44.3
March	...	...	59 on 31st	...	24 on 10th & 11th	...	41
April	...	...	70 on 20, 21, & 22nd		27 on 15th	...	49
May	...	...	73 on 15th	...	29 on 25th	...	44
June	...	...	80 on 17th	...	36 on 8th	...	58.6
July	...	...	84 on 21st	...	38 on 4th	...	62.1
August	...	...	86 on 14th	...	41 on 16th	...	61.1
September	...	...	78 on 10th	...	29 on 21st	...	55.8
October	...	...	64 on 3rd & 10th	...	29 on 19th	...	49.6
November	...	...	59 on 26th & 30th		21 on 18th	...	42.9
December	...	...	52 on 2nd	...	20 on 23rd	...	38.4

				Mean at dew point.		Monthly range.
January	...	...	...	35.6	...	37
February	...	...	...	38.6	...	41
March	...	...	...	38.7	...	35
April	...	...	...	43.0	...	43
May	...	...	...	46.0	...	51
June	...	...	...	56.2	...	44
July	...	...	...	54.0	...	46
August	...	...	...	58.0	...	45
September	...	...	...	54.1	...	49
October	...	...	...	44.8	...	35
November	...	...	...	39.4	...	38
December	...	...	...	33.6	...	32

The following are details of wind, &c. For comparison 10 is taken as a maximum for ozone, 12 for wind, and 10 for cloud :—

			N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
January	...	...	2	7	—	6	1	8	1	6
February	...	...	1	—	—	3	9	15	—	—
March	...	...	2	1	2	3	4	2	14	3
April	...	...	1	1	—	1	5	9	10	3
May	...	...	2	2	2	3	—	6	9	7
June	...	...	2	3	—	3	—	3	9	10
July	...	...	—	3	—	5	7	2	7	7

			N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
August	..	...	—	—	3	4	9	5	7	3
September	...	...	1	1	3	5	4	5	5	6
October	...	...	—	3	4	11	5	—	5	3
November	...	...	—	1	4	4	4	8	5	4
December	...	...	—	2	4	9	3	4	5	4
			—	—	—	—	—	—	—	—
1914	...	...	11	24	22	57	51	67	77	56
1913	...	...	5	54	21	60	31	117	34	18

In 1913 on 24 days the wind was north-west.

											Earth temperature.		
											1ft.	4ft.	
			Ozone.		Sun.		Wind.		Cloud				
January	...	...	3.9	...	.37	...	4.4	...	6.6	...	38	...	41
February	...	...	5.1	...	2.18	...	7.2	...	6.4	...	41	...	43
March	...	...	4.9	...	2.48	...	5.7	...	7.9	...	41	...	43
April	...	...	3.9	...	7.17	...	5.3	...	4.1	...	48	...	46
May	..	...	4.2	...	3.56	...	3.6	...	5.7	...	52	...	50
June	...	...	3.9	...	6.21	...	3.6	...	6.2	...	59	...	55
July	...	...	4.1	...	4.14	...	3.1	...	6.1	...	62	...	59
August	...	...	3.8	...	6.16	...	3.0	...	5.3	...	61	...	59
September	...	...	3.9	...	5.43	...	3.3	...	5.0	...	57	...	58
October	...	...	2.0	...	2.30	...	2.9	...	6.4	...	50	...	53
November	...	...	2.9	...	1.36	...	4.9	...	6.9	...	43	...	48
December	...	...	3.1	...	7.56	...	6.2	...	7.0	...	39	...	44

The following local particulars upon observations made at the Denton Holme Allotment Gardens, were supplied to me by W. Eggleston, Esq.

RAINFALL IN DENTON HOLME.

The rainfall taken weekly at the Denton Holme Allotments, with a gauge of 5 inches, 2 feet above the ground and 57 feet above sea level, amounted last year to 25.185 inches, giving a weekly average of about 0.84. There have been five weeks during the year without rainfall, viz. : April one, June two, August one, and September one. The driest month was June with a rainfall of 1.04 inches. The wettest was November with a fall of 4.19 inches. The evaporation, gauged from an open vessel two feet above ground, during the year was 32.37 inches. The greatest evaporation took place during the month of June, viz. : 5.95 inches ; the lowest in the month of December, viz. : 0.59 inches.

RAINFALL.

MONTHS.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914.		Average for 10 years 1904-1913.
											Rainfall.	Number of days on which Rain fell.	
January	in. 2.18	in. 1.42	in. 4.02	in. 1.16	in. 2.92	in. 1.69	in. 2.73	in. 1.04	in. 1.45	in. 2.17	in. 2.64	17	in. 2.08
February	2.24	1.38	1.70	1.74	2.68	1.50	4.04	3.62	1.39	1.27	2.59	22	2.15
March	2.54	2.56	2.00	2.65	3.68	3.14	1.25	1.33	3.81	3.37	2.67	26	2.63
April	2.36	2.90	.94	2.06	2.08	2.52	1.69	2.75	.42	2.77	1.36	14	2.04
May	2.62	1.56	3.80	3.30	3.28	.81	2.07	2.32	1.81	1.78	1.73	17	2.53
June	1.86	1.26	1.46	4.64	1.70	2.95	1.53	3.79	4.13	2.40	1.06	10	2.57
July	1.84	2.54	2.04	2.38	3.50	4.44	3.76	.69	1.83	1.12	3.04	14	2.41
August	3.54	3.06	4.72	3.32	3.18	3.68	4.28	2.20	4.47	2.17	2.73	13	3.46
September	1.14	2.20	1.30	6.70	3.88	2.50	.38	2.16	2.22	2.11	1.28	11	2.45
October	1.54	2.22	4.40	6.22	1.98	5.22	1.68	2.23	2.10	2.51	1.11	14	3.01
November	2.60	2.54	3.02	2.68	2.56	.86	3.61	3.34	2.65	3.40	4.52	20	2.72
December	2.26	1.34	2.48	5.64	1.86	3.82	2.62	4.73	3.73	2.46	3.58	23	2.89
Totals ...	26.72	24.98	31.88	36.49	33.30	33.13	29.64	30.20	30.01	27.17	28.31	201	30.35
Total number of days on which Rain fell	198	182	194	211	201	162	197	181	217	194	...	...	...

In August last, soon after the commencement of the war, the weather forecasts for this district, which were during the past two years received daily from the Meteorological Office, South Kensington, ceased, owing to instructions by the Government.

The forecasts were most reliable and were much appreciated by the citizens, and I hope that the time is not far distant when the responsible authority will again permit us to be supplied with the daily forecasts. In the meantime the weather observations taken at the Cemetery continues to be posted up at the Town Hall.

ANNUAL REPORT

OF

CHIEF SANITARY INSPECTOR.

CHIEF INSPECTOR'S ANNUAL REPORT.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH
COMMITTEE.

Gentlemen,

I have the honour of presenting to you my Annual Report upon the work of the Sanitary Inspectors for the year 1914.

The inspection of the district has been carried out as in previous years, but owing to the depletion of the staff consequent upon three men joining the army, the activities of the department have been limited.

I am, Gentlemen,

Your obedient Servant,

C. W. HILL,

Chief Sanitary Inspector.

HOUSE INSPECTION.

Table giving name of street, number of houses inspected, and particulars of defects found.

Name of Street	Number of houses inspected	Defective water-closets	Choked and defective drains, gullies, and waste pipes	Dilapidated flagging and paving	Defective roofs and spouting of houses	Defective walls, floors, stair-cases, & ceilings of houses	Insufficient light & ventilation	Miscellaneous	Houses unfit for human habitation.
Nelson Street	57	5	12	7	2	...	...	3	...
East Dale Street	19	3	...	2	4	...	...	1	...
Denton Street	114	4	9	10	30	3	...	4	...
Dalston Street	23	1	...	3	6	...	...	...	...
Hope Street	22	1	...	...	4	...	...	...	...
East Norfolk Street	52	6	2	8	13	2	...	...	...
Graham Street	44	7	8	7	19	3	...	1	...
East Nelson Street	27	4	...	4	4	2	...	...	...
Metcalfe Street	42	3	4	3	8	...	...	...	...
Garfield Street	22	5	1	4	1	9	...	2	...
Denton Crescent	37	1	...	2	6	...	...	...	...
Ehn Street	14	...	...	1	4	...	...	...	...
Lime Street	35	2	3	4	4	...	...	...	...
Thomas Street	19	3	...	1	7	...	...	...	...
Colmore Street	3	...	...	...	...	...	...	...	...
North Street	19	...	...	...	...	...	...	...	...
Bridge Terrace	11	...	...	...	...	...	...	...	...
Caldew Terrace	18	...	...	...	...	...	...	...	...
Randall Street	12	...	...	1	1	...	...	...	...
Lorne Crescent	11	...	...	...	...	...	...	...	...
Charlotte Street	62	4	3	5	7	1	...	3	...
Milbourne Street	8	1	...	...	...	1	...	...	...
Milbourne Crescent	32	1	...	1	4	...	...	...	...
Chapel St., Willow Holme	29	...	...	...	...	2	...	...	14
Jane Street	6	...	...	...	...	...	...	...	6
Willow Holme	10	...	...	...	...	...	...	...	8
Brewery Row	3	...	...	...	...	...	...	...	3
McCutcheon's Ct., Milbourne St.	2	...	...	...	...	...	...	...	2
Hutchinson's Lane, Stanwix	9	...	...	...	...	...	...	...	9
Kell's Place, Stanwix	1	...	...	...	...	...	...	...	1
Church Street, Stanwix	4	...	...	2	...	1	...	...	...
Stanwix Bank	2	...	...	...	...	...	...	...	2
Crown Street	66	These houses comprise a congested area situate on west side of Citadel Station. No action has yet been taken regarding them, as it is intended to deal with the area in a comprehensive manner.							
Currock Street	5								
South John Street	137								
Robert Street	40								
Water Street	43								
South George Street	16								
Totals	1076	51	42	65	124	24	...	14	45

BAKEHOUSES.

There are 45 bakehouses upon the register, 4 of which are underground bakehouses.

These premises have been carefully supervised and 24 notices served to procure compliance with the provisions of the Factory and Workshop Act, viz.:—22 for lime-washing, 1 for defective paving, and 1 for a defective gully.

DAIRIES, COWSHEDS, AND MILKSHOPS.

There are 44 cow-keepers and milk-sellers upon the register. Their premises have been inspected, and the provisions of the Dairies, Cowsheds, and Milkshops Order as to air space and ventilation, cleansing of milk vessels, &c., have been enforced.

COMMON LODGING-HOUSES.

There are 3 licensed common lodging-houses within the City. Several visits have been paid to these houses both day and night, and the conditions found were generally satisfactory.

FRIED FISH AND POTATO SHOPS.

There are 28 fried fish and potato shops on the register. These places have been frequently inspected, and the occupiers enjoined to observe cleanly methods in the management of their business.

ICE CREAM SHOPS.

There are 7 ice cream shops in the City. They have been frequently inspected for the purpose of ascertaining their sanitary condition, and attention has also been paid to the articles used in the manufacture of this commodity.

OFFENSIVE TRADES.

The premises whereon offensive trades are carried on have received attention, and in each case the business was found to be conducted in a proper manner.

VANS USED AS DWELLINGS.

All the vans entering the City to attend fairs, &c., have been inspected in order to ascertain their sanitary condition. On the whole they were found to be satisfactory.

URINALS AND GULLIES.

These have been regularly cleansed by the staff of men employed for this purpose.

PUBLIC MARKETS.

The Public Markets and premises where food is prepared or exposed for sale have been regularly inspected, and the necessity of the observance of hygienic measures being taken have been constantly pointed out.

DISEASED AND UNSOUND FOOD.

The following table shows the amount of food seized or surrendered as being unfit for human consumption:—

Nature of Food Condemned.	Quantity.
Beef	28,884 lbs.
Mutton	423 „
Pork	791 „
Veal	85 „
Fish	56 „

PROSECUTION RELATING TO UNSOUND MEAT.

On November 28th two forequarters and several smaller pieces of beef, all of which were in a putrefactive condition and unfit for human consumption, were seized at a shop in the Public Market.

The forequarters and two at least of the pieces of beef were parts of an animal which, when alive, was in an emaciated and unsound condition.

The person to whom the meat belonged was prosecuted, a conviction was obtained, and a fine of £50 was imposed with costs, in all £52 9s. 6d.

PUBLIC ABATTOIR AND RAILWAY SLAUGHTER-HOUSES.

Frequent visits have been paid to the Public Abattoir, which has been kept in a satisfactory condition.

The Railway Slaughter-houses have also been frequently visited, but difficulty has been experienced in securing satisfactory conditions at the places.

The following tables give the number of animals killed during the years 1905—1914:—

PUBLIC SLAUGHTER-HOUSES.

Year.	Beasts.	Sheep and Lambs.	Calves.	Pigs.	Total.
1905	3,946	15,657	751	4,674	25,028
1906	4,059	15,274	797	4,139	24,269
1907	4,020	14,745	962	4,419	24,146
1908	3,772	14,911	760	4,064	23,507
1909	3,713	16,799	690	3,744	24,946
1910	3,562	16,491	716	3,444	24,213
1911	3,462	15,711	808	4,018	24,000
1912	3,294	15,499	653 & 1 goat	3,993	23,439
1913	3,441	15,424	654	3,412	22,931
1914	3,668	15,320	616	3,687	23,291

L. & N. W. RAILWAY COY.'S SLAUGHTER-HOUSE.

Year.	Sheep.	Lambs.	Calves.	Pigs.	Total.
1913	38,922	...	2	...	38,924
1914	45,494	...	...	...	45,494

N. E. RAILWAY COY.'S SLAUGHTER-HOUSE

Year.	Beasts.	Sheep.	Lambs.	Calves.	Pigs.	Total.
1913	...	39,426	...	...	...	39,426
1914	...	56,779	...	...	...	56,779

M. R. COY.'S SLAUGHTER-HOUSE.

Year.	Beasts.	Sheep.	Lambs.	Calves.	Pigs.	Total.
1913	...	20,289	...	...	...	20,289
1914	...	17,856	...	...	...	17,856

FOOD AND DRUGS.

During the year the articles set out in the following table have been purchased and submitted to the Public Analyst for analysis:—

The following table shows the number of articles purchased, result of analysis, and action taken :—

Article.	No. of Samples taken.	Genuine.	Adulterated.	Extent and Form of Adulteration.	Remarks.
Butter	34	33	1	Water 14% beyond legal limit	Informal sample. Another sample purchased and found to be genuine. Vendor proceeded against and ordered to pay costs of case. } No action taken. (e) Informal sample. (f) Formal sample from source E. As a result of the deficiency in samples E and F an appeal to the cow was made. The sample of milk from the cow was found to be genuine. Vendor cautioned. Informal sample. Vendor cautioned. Informal sample. Vendor cautioned. " " " " " " " " " " " "
Milk	33	27	6	(a) Contained 3.3% of added water (b) Milk fat 0.10% below legal limit (c) " 0.10% " " (d) " 0.10% " " (e) Non-fatty solids 0.40% below legal limit (8.5%) (f) " 0.58% " "	
Whiskey	15	13	2	(a) Sample 3.3% below legal limit (b) " 10.2% " "	
Cream	7	5	2	(a) Sample contained boric acid but bore no label (b) " " less than 35% milk fat with boric acid	
Cheese	18	18	...	...
Pearl Barley	12	12	...	...
Coffee	11	11	...	...
Margarine	11	11	...	...
Lard	6	6	...	...
Blackcurrant Jam	2	2	...	...
Number of Samples taken	149				
Genuine	...	138			
Adulterated	...		11		

FACTORY AND WORKSHOP ACTS.

The total number of workshops upon the register, excluding bakehouses, is 244, as compared with 232 in the year 1913.

These workshops have been inspected, and where any infringement of the Factory and Workshop Acts were discovered, steps were taken to have the same remedied.

17 workshops were found to be without the Factory Abstract affixed, as prescribed by Section 128 of the Act. In each instance the Factory Inspector was notified.

7 complaints were received from H.M. Inspector of Factories relating to sanitary defects in factories and workshops.

All the complaints were investigated and the defects remedied, viz.:—

Defective Sanitary Convenience	...	3
Unsuitable Sanitary Convenience	...	1
Dirty Workshop	... ..	2
Smell from Urinal	... ..	1
		<hr/>
		7
		<hr/>

OUT-WORKERS.

7 lists of out-workers have been received, as required by the home-work provisions of the Factory and Workshop Act, 1901.

All the premises were visited and were found to be in a satisfactory condition.

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1.—Inspection of Factories, Workshops, and Workplaces.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF
NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES (Including Factory Laundries)	86	...	...
WORKSHOPS (Including Workshop Laundries)	381	54	...
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report)	10	..	...
TOTAL	477	54	...

2.—Defects found in Factories, Workshops, and Workplaces.

Particulars.	Number of Defects.			Number of Pro- secutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness	44	44	...	...
Want of ventilation	1	1	...	..
Overcrowding... ..	2	2	...	...
Want of drainage of floors ...	...	...	...	...
Other nuisances	2	2	...	...
Sanitary accommodation :—				
{ Insufficient	2	2	...	...
{ Unsuitable or defective	2	2	...	...
{ Not separate for sexes	1	1	...	...
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of under- ground bakehouse (s. 101)...	...	..	...	..
Breach of special sanitary re- quirements for bakehouses (ss. 97 to 100) ... ..	...	...	...	...
Other offences (Excluding offences relating to outwork, which are in- cluded in Part 3 of this report)	...	...	...	..
Total	54	54	...	...

3.—Home Work.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.					
	Lists received from Employers.					
	Sending twice in the year.			Sending once in the year.		
	Lists.	Outworkers.		Lists.	Outworkers.	
		Con-tractors.	Work-men.		Con-tractors.	Work-men.
Wearing apparel—						
Making, &c. ...	6	...	11	1	...	1
Cleaning and Washing ...	...	...	...	...	..	..
Total ...	6	...	11	1	...	1

4.—Registered Workshops.

Workshops on the Register (s. 131) at the end of the year			Number.
Important classes of work-shops, such as workshop bakehouses, may be enumerated here.	Workshops ...	...	223
	Domestic Workshops ...	...	21
	Bakehouses ...	...	45
	Total number of workshops on Register ...		289

5.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901) ...	17
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory & Workshop Acts (s. 5, 1901) :	
Notified by H.M. Inspector ...	7
Reports (of action taken) sent to H.M. Inspector ...	8
Other ...	...
Underground Bakehouses (s. 101) :—	
In use at the end of the year ...	4

SHOPS.

Frequent inspections have been made under the provisions of the Shops Act, 1912, both during the day and at night time.

15 shop-keepers were summoned at the Police Court for infringing the provisions of the Shops Act.

In 6 instances a fine was imposed, and in 9 instances the Magistrates dismissed the case with a caution to each shop-keeper.

HOUSE REFUSE REMOVAL.

15,007 loads of refuse have been collected and removed to the refuse tips and destructor, this being an increase of 187 loads as compared with 1913.

GARBAGE.

181 loads of garbage have been removed by the Corporation carters from the Public Slaughter-houses, as compared with 132 in 1913.

INFECTIOUS DISEASES.

356 cases of infectious diseases, excluding tuberculous diseases and ophthalmia neonatorum were notified, as compared with 271 in 1913.

All the cases were investigated and reported upon to the Medical Officer of Health, and 229 cases were removed to the hospital for isolation.

DISINFECTION.

All the houses from which cases of infectious disease were removed to hospital, and rooms in which cases were isolated at home, were either sprayed with formaldehyde or cleansed under supervision of your inspectors.

The bedding, clothing, &c., used, or which had been in contact with the infected person, was also disinfected by steam.

The following is a list of articles disinfected :—

Mattresses	...	...	...	556
Beds	...	...	...	306
Bolsters and Pillows	...	...	...	1,196
Blankets	...	...	...	4,230
Quilts	...	...	...	819
Sheets	...	...	...	286
Carpets and Rugs	...	...	...	449
Wearing Apparel	...	...	...	1,450
Miscellaneous Articles	...	...	...	1,211
Total				<hr/> 10,503 <hr/>

HORSES.

The number of horses under my charge at the Dépôt, Boustead's Grassing, is 21. 11 of these are engaged in house refuse removal, 9 are used for street cleansing purposes, and 1 is kept as a relief horse.

Summary of Sanitary Work performed in
connection with Inspection of District.

INSPECTIONS.	Number of	
	Premises Inspected.	Visits Paid.
HOUSES—		
Houses inspected in routine - -	1055	1175
„ inspected on complaint - -	71	83
„ „ for special enquiry - -	120	132
Visits <i>re</i> Infectious Diseases - -	547	676
Common Lodging-houses inspected -	3	28
Common Yards, Courts, & Alleys inspected	Numerous	
TRADE PREMISES—		
Bakehouses - - - -	45	187
Laundries - - - -	1	2
Stables - - - -	9	42
Cowsheds - - - -	34	86
Milkshops - - - -	10	81
Ice Cream Shops - - - -	7	34
Fried Fish Shops - - - -	28	98
Food Manufactories - - - -	15	37
Slaughter-houses - - - -	4	174
Markets - - - -	4	172
Other Factories - - - -	71	71
„ Workshops and Workplaces -	391	582
Chimneys observed (smoke nuisances) -	6	35
Visits after serving notice to supervise works in progress - - - -	—	1824

Remedial Works.

HOUSES—					
Houses disinfected	-	-	-	-	323
„ from which bedding, &c., was removed for disin-					
fection	-	-	-	-	316
„ in which overcrowding abated	-	-	-	-	6
Dirty houses and bedding cleansed	-	-	-	-	7
Walls, damp and defective, remedied	-	-	-	-	28
Roofs, guttering, or spouting repaired	-	-	-	-	133
DRAINAGE—					
New water-closets provided	-	-	-	-	7
Water-closets repaired and unstopped	-	-	-	-	85
Cisterns and flushing apparatus repaired	-	-	-	-	47
Sinks provided	-	-	-	-	4
Drains reconstructed	-	-	-	-	11
„ tested by water, smoke, or chemicals	-	-	-	-	100
„ repaired and unstopped	-	-	-	-	63
New gullies provided	-	-	-	-	36
Downspouts disconnected from sewer	-	-	-	-	25
WATER—					
Samples taken for analysis	-	-	-	-	29
Wells closed	-	-	-	-	21
Houses connected with water mains	-	-	-	-	29
YARDS—					
Yards paved and repaired	-	-	-	-	54
Accumulations of manure, &c., removed	-	-	-	-	28
TRADE PREMISES—					
Workshops cleansed and limewashed	-	-	-	-	8
Bakehouses „ „	-	-	-	-	36
Other improvements affected	-	-	-	-	10
FOOD—					
Carcases condemned	-	-	-	-	71
Other foods	-	-	-	-	56 lbs. fish
VARIOUS—					
Refuse tips (visits)	-	-	-	-	48
Temporary or movable dwellings inspected	-	-	-	-	138
Birds and animals improperly kept	-	-	-	-	16
Smoke emission abated	-	-	-	-	6
LEGAL WORK—					
Notices served, informal	-	-	-	-	890
„ „ statutory	-	-	-	-	0
Notices complied with	-	-	-	-	697
„ not „	-	-	-	-	193

TEXT IN
GUTTERS

TIGHT
GUTTERS

